VOLUME XV NUMBER 1

The George Washington University Bulletin

CATALOGUE NUMBER

MARCH 1916

PUBLISHED BY THE UNIVERSITY AT WASHINGTON, D. C., MARCH, JUNE, OCTOBER, AND DECEMBER

Entered October 6th, 1904, at Washington, D. C., as second-class matter under Act of Congress of July 16th, 1894

THE

GEORGE WASHINGTON UNIVERSITY

BULLETIN

CATALOGUE NUMBER

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PART I
GENERAL AND HISTORICAL

1916							1917							1917						
JULY							JANUARY							JULY						
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2	3	4	5	6	7	8	7	8	9	10	11	12	13	8	9	10	11	12	13	14
9	10	11	12	13	14	15	14	15	16	17	18	19	20	15	16	17	18	19	20	21
16	17	18	19	20	21	22	21	22	23	24	25	26	27	22	23	24	25	26	27	28
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13	14	15	16	17	18	19	11	12	13	14	15	16	17	12	13	14	15	16	17	18
20	21	22	23	24	25	26	18	19	20	21	22	23	24	19	20	21	22	23	24	25
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SEPTEMBER							MARCH							SEPTEMBER						
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10	11	12	13	14	15	16	11	12	13	14	15	16	17	9	10	11	12	13	14	15
17	18	19	20	21	22	23	18	19	20	21	22	23	24	16	17	18	19	20	21	22
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OCTOBER							APRIL							OCTOBER						
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8	9	10	11	12	13	14	8	9	10	11	12	13	14	7	8	9	10	11	12	13
15	16	17	18	19	20	21	15	16	17	18	19	20	21	14	15	16	17	18	19	20
22	23	24	25	26	27	28	22	23	24	25	26	27	28	21	22	23	24	25	26	27
29	30	31	..	..	..	..	29	30	..	..	..	..	..	28	29	30	31	..	..	..
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NOVEMBER							MAY							NOVEMBER						
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12	13	14	15	16	17	18	13	14	15	16	17	18	19	11	12	13	14	15	16	17
19	20	21	22	23	24	25	20	21	22	23	24	25	26	18	19	20	21	22	23	24
26	27	28	29	30	..	..	27	28	29	30	31	..	..	25	26	27	28	29	30	..
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DECEMBER							JUNE							DECEMBER						
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10	11	12	13	14	15	16	10	11	12	13	14	15	16	9	10	11	12	13	14	15
17	18	19	20	21	22	23	17	18	19	20	21	22	23	16	17	18	19	20	21	22
24	25	26	27	28	29	30	24	25	26	27	28	29	30	23	24	25	26	27	28	29
31	..	..	..	..	..	..	..	..	..	..	..	..	..	30	31	..	..	..	..	..

UNIVERSITY CALENDAR

1916

May	1	*Monday.*—Last day on which theses of candidates for degrees at Commencement may be presented.
May	15	*Monday.*—Doctorate Disputation.
May	25–29	*Thursday* to *Monday.*—Examinations for admission.
May	30	*Tuesday.*—A holiday in all Departments of the University.
May	31	*Wednesday.*—Annual meeting of the Board of Trustees.
June	4	*Sunday.*—Baccalaureate Sermon.
June	7	*Wednesday.*—University Commencement.

SUMMER VACATION

June 24	*Saturday.*—Registration for Summer School.
June 26	*Monday.*—Summer School begins.
September 27	*Wednesday.*—Academic Year begins in all Departments of the University.
October 11	*Wednesday.*—Stated meeting of the Board of Trustees.
Nov. 30–Dec. 2	*Thursday* to *Saturday*, both inclusive.—Thanksgiving recess.

RECESS FROM DECEMBER 23, 1916, TO JANUARY 1, 1917, BOTH INCLUSIVE

1917

January	10	*Wednesday.*—Stated meeting of the Board of Trustees.
January	22	*Monday.*—Last day on which theses of candidates for degrees at the Winter Convocation may be presented.
February	5	*Monday.*—Second half-year begins.
February	5	*Monday.*—Doctorate Disputation.
February	22	*Thursday.*—Winter Convocation. A holiday in all Departments of the University.
April	6–9	*Friday* to *Monday*, both inclusive.—Easter holidays.
April	10	*Tuesday.*—Davis Prize Speaking.
April	30	*Monday.*—Last day on which theses of candidates for degrees at Commencement may be presented.
May	14	*Monday.*—Doctorate Disputation.
May	21–24	*Monday* to *Thursday.*—Examinations for admission.
May	30	*Wednesday.*—A holiday in all Departments of the University.
May	31	*Thursday.*—Annual meeting of the Board of Trustees.
June	3	*Sunday.*—Baccalaureate Sermon.
June	6	*Wednesday.*—Commencement.

THE LEGAL HISTORY OF THE CORPORATION

The George Washington University is the successor of the "Columbian College in the District of Columbia," which was chartered by Act of Congress in 1821. The name and title of the Columbian College were in 1873 changed by an Act of Congress, under the terms of which the College was given the name of the "Columbian University." The Columbian University was by Act of Congress in 1904 authorized to change its name, subject to the approval of the Secretary of the Interior and the Commissioner of Education. The Board of Trustees elected to take the name of "The George Washington University," and the name was approved by the government officials, as required by the statute; the change of name going into effect September 1, 1904. All the Acts of Congress now in force relative to the Columbian College and the Columbian University are therefore parts of the charter of The George Washington University.

The original charter of the Columbian College was as follows:

An Act to incorporate the Columbian College, in the District of Columbia

Be it enacted, &c., That there be erected, and hereby is erected and established, in the District of Columbia, a College, for the sole and exclusive purpose of educating youth in the English, learned, and foreign languages, the liberal arts, sciences, and literature; the style and title of which shall be, and hereby is declared to be, the "Columbian College in the District of Columbia."

SEC. 2. *And be it further enacted*, That the said College shall be under the management, direction, and government of a number of Trustees, not exceeding thirty-one, to be elected triennially, by the contributors to the said College, qualified to vote, in such manner, and under such limitations and restrictions, as may be provided by the ordinances of the College, on the first Monday in May; and that the first Trustees of the said College shall consist of the following persons, viz: Obadiah B. Brown, Luther Rice, Enoch Reynolds, Josiah Meigs, Spencer H. Cone, Daniel Brown, Return J. Meigs, Joseph Gibson, Joseph Cone, Thomas Corcoran, Burgis Allison, Thomas Sewall, and Joseph Thaw: which said Trustees, and their successors, shall forever hereafter be, and they are hereby declared to be, one body politic and corporate, with perpetual succession, in deed and in law, to all intents and purposes whatsoever, by the name, style and title of the "Columbian College in the District of Columbia;" by which name and title, they, the said Trustees, and, their successors, shall be competent and capable, at law and in equity, to take to themselves and their successors, for the use of the said College, any estate, in any messuage, lands, tenements, hereditaments, goods, chattels, moneys, and other effects, by gift, grant, bargain, sale, conveyance, assurance, will, devise, or bequest, of any person or persons whatsoever: *Provided*, The same do not exceed, in the whole, the yearly value of twenty-five thousand dollars; and the same messuages, lands,

tenements, hereditaments, and estate, real and personal, to grant, bargain, sell, convey, assure, demise, and to farm, let, and place out on interest, for the use of the said College, in such manner as to them, or at least nine of them, shall seem most beneficial to the institution, and to receive the rents, issues, and profits, income and interest, of the same, and to apply the same to the proper use and benefit of the said College; and by the same name to sue, commence, prosecute, and defend, implead and be impleaded, in any courts of law and equity, and in all manner of suits and actions whatsoever, and generally, by and in the same name, to do and transact all and every the business touching or concerning the premises.

SEC. 3. *And be it further enacted*, That the said Trustees shall cause to be made for their use one common seal, with such devices and inscriptions thereon as they shall think proper, under and by which all deeds, diplomas, certificates, and acts of the said College, shall pass and be authenticated; and the same seal, at their pleasure, to break and devise a new one.

SEC. 4. *And be it further enacted*, That the said Trustees, or five of them at least, shall meet at the College, on College Hill, in the said District of Columbia, on the first Monday in March next, for the purpose of concerting and agreeing to such business as, in consequence of this Act, shall be proper to be laid before them at the commencement of the work they have undertaken, and shall have power to adjourn from time to time, as they shall see cause, to any other times or places, for the purpose of perfecting the same. That there shall be a stated meeting of the said Trustees held twice in every year at least, at such place and time as the said Trustees, or a quorum thereof, shall appoint, of which public notice shall be given, after the first meeting, at least twenty days before [the] time of such intended meeting, whenever the President, to be appointed by them, shall deem the business of the institution to require the same, and give due notice thereof, which he is hereby authorized to do; and if, at such stated or occasional meetings, five of the said Trustees shall not be present, those of them who shall be present shall have power to adjourn the meeting to any other day, as fully and effectually, to all intents and purposes, as if the whole number of Trustees for the time being were present; but, if five or more of the said Trustees shall meet at the said appointed times, or at any other time of adjournment, then such five of the said Trustees shall be a board or quorum, and a majority of the votes of them shall be capable of doing and transacting all the business and concerns of the said College not otherwise provided for by this Act; and particularly of making and enacting ordinances for the government of the said College; of electing and appointing the President, Professors, and Tutors, for the said College; of agreeing with them for their salaries and stipends, and removing them for misconduct, or breach of the laws of the institution; of appointing committees of their own body to carry into execution all and every the resolutions of the Board; of appointing a President, Treasurer, Secretary, stewards, managers, and other necessary and customary officers, for taking care of the estate and managing the concerns of the corporation; and, generally, a majority of voices of the board, or quorum of the said Trustees, consisting of five persons at least, at any semi-annual, occasional, or adjourned meeting, after notice, given as aforesaid, shall determine all matters and things (although the same be not herein particularly mentioned) which shall occasionally arise, and be incidentally necessary to be determined and transacted by the said Trustees *Provided always*, That no ordinances shall be of force which shall be repugnant to this charter, or to the laws of the District of Columbia.

SEC. 5. *And be it further enacted*, That the head or Chief Master for the said College shall be called and styled the "President," and the Masters thereof shall be called "Professors and Tutors;" but neither President, Professors, or Tutors, while they remain such, shall ever be capable of the office of Trustee.

SEC. 6. *And be it further enacted* That the President, Professors and Tutors, or a majority of them, shall be called and styled the "Faculty of the College," which Faculty shall have the power of enforcing the rules and regulations adopted by the Trustees for the government of the pupils, by rewarding or censuring them, and finally, by suspending such of them who as after repeated admonitions shall continue disobedient and refractory, until a determination of a quorum of the Trustees can be had; and of granting and confirming, by and with the approbation and consent of a board of the Trustees, signified by their mandamus, such degrees in the liberal arts and sciences, to such pupils of the institution or others, who, by their proficiency in learning, or other meritorious distinction, they shall think entitled to them, as are usually granted and conferred in colleges; and to grant to such graduates, diplomas or certificates, under their common seal, and signed by the Faculty, to authenticate and perpetuate the memory of such graduation.

SEC. 7. *And be it further enacted*, That persons of every religious denomination shall be capable of being elected Trustees; nor shall any person, either as President, Professor, Tutor, or pupil, be refused admittance into said College, or denied any of the privileges, immunities, or advantages thereof, for or on account of his sentiments in matters of religion.

SEC. 8. *And be it further enacted*, That no misnomer of the said corporation shall defeat or annul any gift, grant, devise, or bequest, to or from the said corporation: *Provided*, The intent of the parties shall sufficiently appear upon the face of the gift, grant, will, or other writing, whereby any estate or interest was intended to pass to or from the said corporation.

SEC. 9. *And be it further enacted*, That the constitution of the said College, herein and hereby declared and established, shall be, and remain, the inviolate constitution of the said College forever; and the same shall not be altered or alterable by any ordinance or law of the said Trustees: *Provided*, That it may be lawful for the Congress of the United States to revoke and repeal this Act, at any and at all times whenever they shall think fit so to do.

SEC. 10. *And be it further enacted*, That it shall be the duty of the said Board of Trustees to keep a regular book or journal, in which shall be entered, under their direction, besides an account of all their ordinary acts and proceedings, all the by-laws, ordinances, rules, and regulations, which may be adopted by the said Board for their own government, and for the government of the institution; also, a schedule of all the property and effects, real, personal, or mixed, which shall or may be vested in the said Trustees, for the use of the said College, by virtue of any gift, grant, bargain, sale, will, or otherwise, together with annual statements concerning the accounts and finances of the institution. That it shall, moreover, be the duty of the said Trustees, to cause to be enrolled, in the said book or journal, the names of all the contributors to the institution qualified to vote for Trustees, with their respective places of residence; and the said book or journal shall, at all times be open to the inspection or examination of the Attorney General of the United States; and, when required by either House of Congress, it shall be the duty of said Trustees to furnish information respecting their own conduct, the state of the institution, and of its finances, which shall or may be so required.

SEC. 11. *And be it further enacted*, That in case any vacancy or vacan-

cies shall happen in the Board of Trustees aforesaid by death, inability, resignation, or otherwise, at any time between the stated or triennial elections, that then it shall and may be lawful for the other Trustees, or any five of them, to proceed, at any subsequent meeting after the happening of such vacancy or vacancies, to choose, by ballot, any suitable person or persons to fill the same.

SEC. 12. *And be it further enacted*, That the employment or application of the funds or income of the said corporation, or any part thereof, for any purpose or object other than those expressed and defined in the first section of this Act, or the investment thereof in any other mode than is described and provided in the second section thereof, shall be deemed and taken to be a forfeiture of all the rights and immunities derived from this Act, and the same shall, thenceforth, cease and become null and void.

Approved, February 9, 1821.

By Act of Congress of July 14, 1832, there were donated to the Columbian College Washington city lots to the value of twenty-five thousand dollars; the Act providing that the fund arising from the proceeds of the sale of the lots should constitute an endowment fund for the support of professorships. By Act of February 28, 1839, permission was granted to the College to use seven thousand dollars of the fund for the payment of its debts.

By Act of Congress of February 21, 1871, a form of government by an elected Governor and Legislative Assembly was established for the District of Columbia, and on July 25, 1871, the Legislative Assembly passed the following statute:

An Act for the relief of the Columbian College, in the District of Columbia

Be it enacted by the Legislative Assembly of the District of Columbia, That the Columbian College, in the District of Columbia, chartered by and organized and acting under the Act of Congress approved February nine, eighteen hundred and twenty-one, may, from the proceeds of any sale of its property, apply such sum as may be needful to pay its present indebtedness and place its libraries, buildings, and apparatus of instruction in good condition, and execute all deeds needful to quiet the title of property already sold.

SEC. 2. *And be it further enacted*, That the Trustees of said College elected in May last shall constitute the corporation of said College until their successors in office shall be chosen and qualified as hereinafter provided, and may, until then, as vacancies occur in their number, temporarily fill them by the election of fit persons residing in the District of Columbia.

SEC. 3. *And be it further enacted*, That the said Trustees shall meet in the Law Building of said College at noon, on the twenty-fifth day of June, eighteen hundred and seventy-two, for the purpose of choosing, and shall then and there, or at the time and place to which said meeting may be adjourned, elect thirteen Trustees and thirteen Overseers, who shall, upon their election, constitute the College corporation, and they and their successors shall thenceforward be, and be known and recognized as, the Columbian College in the District of Columbia.

SEC. 4. *And be it further enacted*, That the Trustees chosen at the said meeting in June, eighteen hundred and seventy-two, or who may thereafter be chosen, shall be residents of the District of Columbia, and that at said meeting, and at any annual meeting of Trustees and Over-

seers to be thereafter held in said City of Washington on the Tuesday next preceding the last Wednesday in June, annually, the Trustees and Overseers in convention assembled shall fill vacancies in their Board, and shall, by ballot, elect from among the Trustees two suitable persons, one to be President and the other to be Treasurer and Secretary of said corporation and of the Board of Trustees, and shall establish ordinances and by-laws, or alter or repeal the same; and also frame laws and regulations for the College Faculty and students in all the departments thereof, and by ballot elect such teachers, tutors, professors, lecturers, and President, and with such salaries and duties as said corporation may deem proper.

SEC. 5. *And be it further enacted*, That at said annual meetings not less than seven Trustees and three Overseers shall constitute a quorum for the transaction of any business except adjournment, and adjournment may be made by any number present: *Provided*, That a final adjournment shall not be delayed beyond one week after the time fixed for the annual meeting.

SEC. 6. *And be it further enacted*, That during the interval between said annual meeting the Trustees shall, as now, hold semi-annual, quarterly, monthly, and occasional meetings to fill temporarily, as the case may require, vacancies in the Faculty or in their own Board, and with all their present powers as modified by this Act, subject to the ordinances and by-laws of the corporation; but no real estate or other property of said corporation shall, after the twenty-fifth day of June, eighteen hundred and seventy-two, be disposed of by the Trustees, except by vote of the corporation or in pursuance of its ordinances.

Approved, July 25, 1871.

This Act of the Legislative Assembly of the District was confirmed by Congress in 1873, and by the same statute the College was given the name of "the Columbian University." This Act was as follows:

An Act supplemental to the Act of February ninth, eighteen hundred and twenty-one, incorporating the Columbia[n] College in the District of Columbia

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the act to incorporate the Columbia[n] College in the District of Columbia, approved February ninth, eighteen hundred and twenty-one, be, and the same is hereby, so modified that said corporation shall be hereafter known and called by the name of the Columbia[n] University, and in that name shall take, hold and manage all the estate and property now belonging to said College, or that may hereafter be conveyed, devised, or bequeathed to said corporation by its original name; that the restriction of the yearly value of the property of the said corporation to the sum of twenty-five thousand dollars be, and the said restriction is hereby, repealed; and that said corporation may increase the number of its Overseers to twenty-one, and the number of its Trustees to twenty-one, exclusive of the President of the Faculty, who shall be, *ex officio*, a Trustee of said corporation.

SEC. 2. That the Act for the Relief of the Columbian College in the District of Columbia enacted by the Legislative Assembly of said District, and approved July twenty-fifth, eighteen hundred and seventy-one, be, and the same is hereby, approved and confirmed: *Provided*, That this Act nor the said Act of the Legislative Assembly of the said District, shall be so construed as to authorize the said Columbian University to sell, or use the proceeds of any sale of land granted by Congress to said institution for any purpose other than that expressed in the Act

of Incorporation and the Act granting any such land or real estate, or contrary to any will, devise or grant of any land or real estate heretofore or hereafter made, by any person or persons to said institution.

Approved, March 3, 1873.

By the Act of Congress of May 31, 1878, it was provided that the annual meeting of the corporation might be held either in May or June, and by the Act of January 14, 1893, it was provided that the Secretary and the Treasurer might be elected from the Trustees or not, as the Board of Trustees might deem proper, and that it should not be necessary that both offices should be held by one person.

In 1898 Congress amended the charter by an Act as follows:

An Act supplemental to the Act of February ninth, eighteen hundred and twenty-one, incorporating the Columbian College in the District of Columbia, and the Acts amendatory thereof

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Columbian University, on and after the first day of June, eighteen hundred and ninety-eight, shall be under the management and control of a Board of Trustees, consisting of twenty-two members; the President of the University shall be *ex officio* a member of said Board, and the remaining twenty-one shall be divided into three classes with seven members in each class; a majority of said Board shall be residents of the District of Columbia, and seven members shall constitute a quorum for the transaction of business. That on or before the thirty-first day of May, eighteen hundred and ninety-eight, a meeting of the Trustees and Overseers of said University shall be held, and said meeting shall elect twenty-one Trustees, seven of whom shall be designated to serve from the first day of June, eighteen hundred and ninety-eight, until the annual meeting in eighteen hundred and ninety-nine; and seven from the same date until the annual meeting in nineteen hundred; and seven until the annual meeting in nineteen hundred and one. Two-thirds of said Trustees, and also the President of the University, shall be members of regular Baptist churches; that is to say, members of churches of that denomination of Protestant Christians now usually known and recognized under the name of the regular Baptist denomination; said Trustees so elected shall serve for the periods mentioned and until their successors are elected. That on the first day of June, eighteen hundred and ninety-eight, the terms of office of the present Trustees and Overseers shall cease and determine and thereupon the control and management of said University, its property and trusts, shall vest in the Board of Trustees elected as hereinabove provided and their successors.

SEC. 2. That at the annual meeting in eighteen hundred and ninety-nine, and annually thereafter, there shall be elected by the Board of Trustees seven Trustees to fill the places of the class whose terms of office expire; and the Board of Trustees may prescribe in a by-law the mode of nominating persons for election as Trustees. A failure to elect Trustees at the annual meeting shall not create vacancies in the Board, but such election may be had and vacancies occurring during the year may be filled for the unexpired term by the Board at any general or special meeting.

SEC. 3. That the Board of Trustees provided for herein shall have, and they are hereby given, full power and authority to appoint and remove any and all officers, professors, lecturers, teachers, tutors, agents,

and employees who are now or may hereafter be elected or appointed; they may, by a vote of two-thirds of all the Trustees constituting said Board, adopt and change by-laws for the conduct of the business and educational work of said University; they may appoint an Executive Committee composed of Trustees, designate the number and Chairman thereof, with such powers and authority as are usually exercised by an Executive Committee, and which shall be conferred by the Board, subject always to the control of the Board of Trustees; they may create and establish schools and departments of learning to be connected with and become a part of said University; they may receive, invest, and administer endowments and gifts of money and property for the maintenance of educational work by said University, and by any department and chair thereof now established or which may hereafter be created or established by said University; and they shall have all the powers and authority heretofore granted to and vested in the Trustees and Overseers of said University.

SEC. 4. That the annual meeting of the Board of Trustees shall be held in the City of Washington, District of Columbia, on the Wednesday nearest the first day of June in each year; two other stated meetings shall be held on the second Wednesday of October and January in each year, and special meetings may be called by the President of the University or by the Executive Committee or by seven members of the Board of Trustees upon such notice and at such hour and place as may be designated in the by-laws; at all meetings any business necessary to be transacted may be considered and acted upon, and any meeting may be adjourned from time to time by the Trustees present, whether constituting a quorum or not, notice of such adjournment to be given, as of called meetings, to those Trustees not present.

SEC. 5. That the terms of office of the President of the University, the Treasurer and other officers, professors, and lecturers, and the employment of agents and employees, and the title to all the property and rights in and management of the endowment funds of the University shall not be affected by the change of management herein provided for, but they shall continue and be subject to the control and management of the Board of Trustees hereby created the same as they are now subject to the control and management of the corporation.

SEC. 6. That all acts and parts of acts inconsistent with the provisions of this Act are hereby repealed.

Approved, March 18, 1898.

In 1904 Congress passed an Act restoring the non-denominational character of the institution and permitting the change of its name. This Act and the certificate of change of name were as follows:

An Act supplemental to the Act of February ninth, eighteen hundred and twenty-one, incorporating the Columbian College in the District of Columbia, and the Acts amendatory thereof

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Act to incorporate the Columbian College, in the District of Columbia, approved February ninth, eighteen hundred and twenty-one, and the amendatory Act approved March eighteenth, eighteen hundred and ninety-eight, be and the same are hereby, amended by repealing and striking out of the said charter the following words in lines twenty to twenty-five in section one of the said amendatory Act of March eighteenth, eighteen hundred and ninety-eight, namely, "Two-thirds of said Trustees, and also the

President of the University, shall be members of regular Baptist churches; that is to say, members of churches of that denomination of Protestant Christians now usually known and recognized under the name of the regular Baptist denomination."

SEC. 2. That section thirteen of the original charter of February ninth, eighteen hundred and twenty-one, which provides "That persons of every religious denomination shall be capable of being elected Trustees; nor shall any person, either as President, Professor, Tutor or pupil, be refused admittance into said College, or denied any of the privileges, immunities, or advantages thereof, for or on account of his sentiments in matters of religion," be, and the same is hereby, re-enacted and shall be hereafter in full force as a part of said charter.

SEC. 3. That power is hereby given to the Board of Trustees of said University to change the name of said University at any regular meeting by a vote of not less than two-thirds of the total number of members of the Board, as prescribed by the charter, subject to the approval of the Secretary of the Interior and the Commissioner of Education. That upon said action being taken a certificate, under the seal of the University, stating the name adopted and the date when the name shall go into effect not less than thirty days nor more than six months from the date of its adoption, together with the fact that said name has been adopted as herein prescribed, shall be filed in the office of the Recorder of Deeds of the District of Columbia, and thereupon, upon the date specified for the name to go into effect, the University shall be known and designated by the name adopted, and by said new name the said University shall be vested with and convey its real estate, hold, control, and administer endowments and gifts of money and property heretofore and hereafter made for the maintenance of its educational work, and do and perform all acts which it now has the power to do under its said charter. Such change of name shall not in any other way change, affect, or modify in any degree the rights, privileges, obligations, and powers of the said University under the charter of February ninth, eighteen hundred and twenty-one, and the amendatory Acts thereto.

SEC. 4. That all Acts and parts of Acts inconsistent with this Act are hereby repealed.

Approved, January 23, 1904.

Certificate of Change of Name of the Columbian University to "The George Washington University"

DISTRICT OF COLUMBIA,
City of Washington:

The Columbian University, in accordance with the Act of Congress approved January 23, 1904, does hereby certify that, at the regular meeting of its Board of Trustees, duly held on the eighth day of June, 1904, at which meeting there were present more than two-thirds of the total number of members of the Board, it was unanimously resolved that, subject to the approval of the Secretary of the Interior and the Commissioner of Education, prescribed by said Act of Congress, the name of this University be changed to that of The George Washington University, the same to go into effect on the first day of September, A. D. 1904.

And it is hereby further certified, that on the twentieth day of June, A. D. 1904, the Secretary of the Interior and the Commissioner of Education duly approved in writing said change of name, which said written approval is hereto attached and made a part hereof.

In testimony whereof, said Columbian University has given this its

certificate under its corporate seal, at the City of Washington, D. C., on the twenty-first day of June, A. D. 1904.

CHARLES W. NEEDHAM,
President.

Attest:
JOHN B. LARNER,
Secretary.
(Corporate Seal.)

UNITED STATES OF AMERICA,
DEPARTMENT OF THE INTERIOR,
WASHINGTON, D. C., *June 20, 1904.*

Pursuant to section 882 of the Revised Statutes, I hereby certify that the annexed paper is a true copy of the original as it appears upon the files of the Department.

In testimony whereof, I have hereunto subscribed my name, and caused the seal of the Department of the Interior to be affixed, the day and year first above written.

E. A. HITCHCOCK,
Secretary of the Interior,
W. B. A.

(Seal of the Department of the Interior.)

Whereas by Act of Congress approved January 23, 1904, the Columbian University was authorized to change its name, subject to the approval of the Secretary of the Interior and the Commissioner of Education;

And whereas it has been made satisfactorily to appear to us that, at the regular meeting of the Board of Trustees of said University, held on the eighth day of June, A. D. 1904, at which meeting there were present more than two-thirds of the total number of members of said Board, it was unanimously resolved to change the name of said University to that of The George Washington University, the same to go into effect on the first day of September, A. D. 1904;

Now, therefore, this is to witness that, pursuant to said Act of Congress, we do hereby, this twentieth day of June, A. D. 1904, approve said change of name.

E. A. HITCHCOCK,
Secretary of the Interior.
W. T. HARRIS,
Commissioner of Education.

(Seal of the Department of the Interior.)

In 1905 a further amendment to the charter was made, as follows:

An Act supplemental to the Act of February ninth, eighteen hundred and twenty-one, incorporating the Columbian College in the District of Columbia, and the Acts amendatory thereof

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That The George Washington University shall have, and is hereby given, power to increase the number of its Trustees from time to time, by a two-thirds vote of the whole number of the Trustees at the time such vote is taken, to a number not exceeding forty-five. In case of the increase of the number of Trustees a certificate, stating the number of the Board and the time when it shall go into effect and that the action so taken was by two-thirds vote as required by this Act, shall be filed with the Recorder of Deeds of the District of Columbia, and upon and after the date named the Board shall consist of the number of Trustees, stated in such certificate, and said

Board may also appoint a Board or Boards of Visitors for any department or departments of educational work carried on by the University, such Boards of Visitors to be advisory only.

SEC. 2. That by and with the consent of said University, Colleges may be organized hereunder for the purpose of carrying on, in connection with the University, special lines of educational work in the arts, sciences, and liberal and technical knowledge, such Colleges to be educationally a part of the system of the University, but upon independent financial foundations, and to this end any five or more persons desirous of associating themselves for the purpose of establishing a College hereunder, may make, sign, and acknowledge before any officer authorized to take acknowledgment of deeds in the District of Columbia, and with the assent of the University in writing, file in the office of the Recorder of Deeds of the said District a certificate in writing, in which shall be stated: First, the intention to organize a corporation under this Act and the assent of the University thereto; second, the name or title by which the College shall be known in law; third, the names of the Trustees constituting the first Board, and such Trustees may be divided into three classes, the term of office of one class expiring annually; fourth, the manner of nominating and electing successors to said Trustees; fifth, the branch or branches of literature, arts, sciences, liberal or technical knowledge proposed to be taught; sixth, that the highest officer of said College shall be a Dean, the Dean and members of the Faculty to be members of the Educational Councils of the University in accordance with the rules governing the University; seventh, that all degrees shall be bestowed by the University; eighth, that in all financial and legal responsibility the College shall be an independent organization. Upon filing such certificate the Trustees named therein and their successors shall be a body politic, incorporated by the name and style stated in the certificate, and by that name and style shall have perpetual succession in association with the University, with power in the College to sue and be sued; plead and be impleaded; to acquire, hold, and convey property in all legal ways; to receive by gift, devise, or otherwise, and hold, control, and administer endowments and gifts of money and property thereafter made to it for the maintenance of its educational work; to have and use a common seal, and to alter and change the same at pleasure; to make and alter from time to time such by-laws, not inconsistent with the Constitution of the United States or the laws in force in said District or the laws of the University regulating the conduct of educational work, as may be deemed necessary for the government of the College, but said College shall not confer academic or honorary degrees; such College shall hold the property of the institution and all moneys and property conveyed to it by purchase, gift, conveyance, will, devise, or bequests solely for the purposes of the educational work specified in said certificate; the Trustees of such College shall faithfully apply all funds collected or received and the proceeds thereof belonging to the institution, according to their best judgment, in purchasing lands and erecting buildings, supporting necessary officers, instructors, and servants, and procuring all equipment, educational and otherwise, necessary to carry on the work of the College.

SEC. 3. That said University may enter into affiliated agreements with any institutions of learning outside of the District of Columbia, for the purpose of giving to students of such institutions the educational facilities of said University and the Departments of the Govermnent in the City of Washington which are by law open to students, upon such terms as are mutually agreed upon by the said University and the affiliated institutions.

Approved, March 3, 1905.

Under section 2 of the Act of 1905, there now exist two colleges which are doing special educational work and which are in active operation—the National College of Pharmacy, organized in 1905, and the College of Veterinary Medicine, organized in 1908. The financial affairs of these Colleges are separate from those of the University, and are managed by their separate Boards of Trustees. The Faculties of these Colleges are also appointed by their respective Boards of Trustees. The connection between these Colleges and the University consists in the fact that their Deans are members of the President's Council, and that the Board of Trustees of the University confers degrees for the work done in these Colleges.

By resolutions of the Board of Trustees of the University of May 6, 1909, and January 12, 1910, provision was made for the nomination by the Alumni of two Alumni Trustees each year. In the spring of 1910, this plan was put in operation, and since then the two persons annually nominated as Alumni Trustees have been elected to membership on the Board.

BY-LAWS OF THE GEORGE WASHINGTON UNIVERSITY

ARTICLE I

The President of the University

SECTION 1. The President of the University shall hold office without limit of time, until his resignation be accepted, or he be removed from office by the Board of Trustees; he shall be the executive head of the University and of all its departments, exercising such supervision, direction, and control as will promote the efficiency of every department; he shall be responsible, under the supervision of the Board of Trustees, for the discipline of the University; he shall preside at the meetings of the Faculties, and be the official medium of communication between the Faculties and the Board of Trustees, and between the students of the University and the Board of Trustees; he shall recommend to the Board of Trustees appointments to the several Faculties; he shall be responsible for carrying out such measures concerning the internal administration of the University as the Board of Trustees may enact. He shall make a yearly report to the Board of Trustees at the January meeting concerning the state of the University. He shall control the expenditure and administration of the yearly budget when formally adopted by the Board of Trustees.

ARTICLE II

Board of Trustees

SECTION 1. No member of the teaching staff of the University except the President of the University, or of the teaching staff of any college incorporated under the charter of the University, while he remains such, shall be capable of holding the office of Trustee of the University.

SEC. 2. At the annual meeting of the Board after the election of Trustees, the Board shall elect by ballot from among their number a Chairman and Vice-Chairman of the Board to serve until the next annual meeting and until their successors are elected and qualified. The Chairman of the Board, and in his absence the Vice-Chairman, shall preside at all meetings of the Board of Trustees.

SEC. 3. At the annual meeting after the election of Trustees the Board shall elect by ballot the following officers, to serve until the next annual meeting and until their successors are elected and qualified: a Secretary, a Treasurer, an Auditor, and a Counsel of the University.

SEC. 4. In the event of a failure for any reason so to elect either or

all of the said officers, or in case of any vacancy from any cause, then an election may be held for the unexpired term at a meeting called for that purpose.

SEC. 5. The annual meeting of the Board of Trustees shall take place on the Wednesday nearest the first day of June of each year, or when that Wednesday is a legal holiday on the first following business day.

SEC. 6. Stated meetings of the Board shall be held on the second Wednesdays of October and January.

SEC. 7. Notice of all stated meetings shall be mailed by the Secretary of the University to each member of the Board at least five days previous to the time of such meetings.

SEC. 8. Special meetings may be called at any time by the President of the University, the Executive Committee, or by seven members of the Board of Trustees. The Secretary shall issue the notices of such meetings.

SEC. 9. The call for special meetings shall state the nature of the business to be considered, and shall be mailed at least two days before the meeting is to be held.

SEC. 10. Seven members of the Board of Trustees shall constitute a quorum for the transaction of any business.

ARTICLE III

Executive Committee

SECTION 1. There shall be an Executive Committee of seven members of the Board of Trustees, of which the President of the University shall be Chairman *ex officio*. The other members of the committee shall be elected by ballot at the annual meeting, and shall serve until their successors are elected.

SEC. 2. In case of inability to act on the part of any member of the Committee his place may be filled by the Board of Trustees.

SEC. 3. Four members of the Committee shall constitute a quorum for the transaction of business.

SEC. 4. The Committee is authorized to transact such business as may require attention between the regular meetings of the Board of Trustees; but the Chairman of the Committee shall make report at each stated meeting of the Board on the proceedings of the Committee during the intervening period, and at any meeting of the Board, if any member of the Board shall request that the report of the proceedings of any meeting or meetings of the Committee be read, the same shall be read by the Secretary.

SEC. 5. Regular meetings of the Committee shall be held during the academic year monthly, and special meetings may be called by the Secretary whenever requested by the Chairman or any two members of the Committee.

SEC. 6. In case of inability to act on the part of the Chairman of the Committee, the Committee may appoint a temporary chairman for the meeting.

ARTICLE IV

Finance Committee

SECTION 1. There shall be a Finance Committee of three members of the Board of Trustees who shall be elected at the annual meeting to serve until their successors are elected.

SEC. 2. The Committee shall invest and reinvest University funds, and shall exercise general supervision over the Treasurer's office, making report at every regular meeting of the Board of Trustees.

ARTICLE V

Visiting Committees

SECTION 1. At the annual meeting there shall be appointed a Committee of three members for each school or department of the University, who shall visit and inspect the condition and conduct of the school or department and make a written report thereon to the January stated meeting of the Board of Trustees.

ARTICLE VI

The Secretary of the University

SECTION 1. The Secretary of the University shall as such attend and keep minutes of all meetings of the Board of Trustees, the Executive Committee, the educational council and faculties, as may by resolution of the Board be required to keep records. He shall give to any meeting at which he is entitled to be present any information concerning University affairs which he may have and which may be proper to be brought before such meeting. He shall have the custody of all the files and records of the University proper to his office; he shall have the custody of the corporate seal of the University, and shall affix it to corporate acts authorized by the Board of Trustees or the Executive Committee, and he shall generally do and perform such administrative duties as may be assigned him by the President from time to time not inconsistent with the by-laws.

ARTICLE VII

The Treasurer of the University

SECTION 1. The Treasurer shall give bond or shall be bonded in a surety company, at the expense of the University, for the faithful performance of his duties in such sum and with such sureties as shall be approved by the Board of Trustees.

SEC. 2. He shall keep all the funds of the University in such bank or banks as the Board of Trustees shall designate; he shall keep the trust funds, and the full account thereof, separate from the current or general funds and accounts of the University; he shall make monthly statements, showing the current financial operations and the condition of the trust funds and other invested funds to the Executive Committee; he shall

make a full report annually to the Board of Trustees as specified in Article XI, and he shall at such other times make such reports as the Trustees may require.

SEC. 3. He shall make payments only by checks upon the bank countersigned by the President of the University, or in his absence by the Secretary, and only for investments, salaries, bills, and expenses authorized by the Board of Trustees or the Executive Committee, provided, however, that when the Treasurer is absent or incapacitated, or when the office of Treasurer is vacant, or when the President and Secretary are both absent or incapacitated, or in any other emergency, the Executive Committee may by resolution make special and temporary arrangements for the signing or countersigning of checks.

ARTICLE VIII

The Auditor of the University

SECTION 1. The Auditor of the University shall make three audits each year of the books and accounts of the Treasurer. The fiscal year shall end at midnight on August 31 of each year, and the accounts shall be audited as of December 31, April 30, and August 31 at midnight.

SEC. 2. A corporation may be elected by the Board of Trustees as the Auditor of the University.

ARTICLE IX

The Counsel of the University

SECTION 1. The Counsel of the University shall render opinions to the President, the Board of Trustees, or to the Executive Committee, when requested, upon legal questions arising in the management of the educational or business affairs of the University, and shall represent the University in all legal proceedings prosecuted by or against the University. The Counsel of the University may be a member of the Board of Trustees.

ARTICLE X

Committee on Catalogue

SECTION 1. Each year the annual catalogue of the University shall be prepared by a committee consisting of the President of the University as Chairman, the Secretary of the University, and three members of the Faculty of the University appointed by the President. The Catalogue shall be published annually in pamphlet form. Each annual catalogue shall contain the charter and by-laws of the University.

ARTICLE XI

Annual Financial Report

SECTION 1. Between July 1 and October 1 in each year there shall be prepared by the Treasurer a financial report showing in detail the

financial condition of the University during the previous year, which financial report shall be certified by the Auditor to be correct. This report shall be laid before the Board of Trustees at their October meeting, and when approved by the Board of Trustees shall, with any modifications ordered by them and assented to by the Treasurer and Auditor, be printed by the University in pamphlet form.

Article XII

Sale of Land and Other Assets

Section 1. Real estate and other securities of the University shall not be sold or disposed of except by direction of the Board of Trustees.

Sec. 2. All deeds and conveyances of real estate belonging to the University shall be signed by the President of the University and the Secretary, and the same shall be acknowledged, attested, and the seal of the University attached thereto by the Secretary.

Article XIII

Amendments

Section 1. These by-laws may be amended or repealed at any meeting of the Board by a vote of the majority of all members of the Board, provided notice of the proposed amendment or change has been sent to each member of the Board at least five days before the meeting.

Article XIV

Former By-Laws Repealed

Section 1. All by-laws heretofore enacted are hereby repealed.

ORDINANCE

ARTICLE I

Organization

SECTION 1. The departments, colleges, and schools forming an integral part of the University are as follows: The Department of Arts and Sciences, comprehending the School of Graduate Studies, Columbian College, the College of Engineering, the Teachers College; the Law School; the Medical School; the Dental School. These departments, colleges, and schools are subject to the Board of Trustees represented by the President of the University, and unless otherwise noted, to the rules and regulations herein set forth.

SEC. 2. Associated colleges organized in accordance with the charter of the University on independent financial foundations are under the immediate control of their respective Boards of Trustees, subject in educational matters to the authority of the President and the University Board of Trustees. The National College of Pharmacy and the College of Veterinary Medicine are such associated colleges.

SEC. 3. The Medical School including the University Hospital, and the Dental School are organized under special ordinances of the Board of Trustees, and are subject to the rules and regulations of this ordinance only where the special ordinances governing them do not conflict with this ordinance.

ARTICLE II

Faculties

SECTION 1. Each department, college, and school shall be under the immediate charge of a faculty subject to the authority of the President's Council. The faculties shall recommend to the Board of Trustees candidates for degrees, diplomas, certificates, and awards.

SEC. 2. Each faculty shall be composed of all the Professors, Assistant Professors, and Instructors who teach in the department, school, or college under the charge of that faculty, and of such other members as the faculty may, on the recommendation of the Dean, with the approval of the President, admit to membership. The President shall be *ex officio* a member of each faculty, and the Secretary shall *ex officio* have voice at all faculty meetings, but no vote.

SEC. 3. A faculty may, at its discretion, delegate any of its purely administrative powers to an executive committee of which a Dean shall be Chairman, the members of which shall be nominated by that Dean and appointed by the President. Every executive committee shall be subject to the authority of the faculty from which it is appointed.

Article III

President's Council

Section 1. The President's Council shall have charge of all administrative educational questions, subject to the confirmation of the Board of Trustees.

Sec. 2. The President's Council shall be responsible for the coördination of work throughout the University and shall have immediate jurisdiction over every administrative educational question touching the interests of more than one department, college, or school.

Sec. 3. The President's Council shall be composed of the President of the University, the Secretary of the University, and of all the Deans in the University, *ex officio*, and of a representative or representatives from each department, college, and school of the University to be elected annually by the faculties of the respective departments, colleges, and schools; those departments, colleges, and schools with a registration of less than two hundred students having one representative, those with more than two hundred students having two representatives.

Article IV

Deans

Section 1. The Dean of each department, college, or school shall be appointed by the Board of Trustees from among the members of its faculty. The Dean shall, under the President, be the chief executive officer of his department, college, or school. As such he shall have authority in his department, college, or school to enforce such regulations as may be imposed by the Board of Trustees or the Faculty. He shall be held responsible for the proper preparation and conduct of the business of his department, college, or school, and for the performance of such administrative duties as pertain to his office and may be required of him by the President. He shall make annual written reports to the President.

Article V

Titles of the Teaching Staff

Section 1. The academic titles of those engaged in teaching shall be Professor, Assistant Professor, Instructor, Assistant, Demonstrator, and Lecturer. The word "Associate" may be prefixed to any title where, under the terms of this ordinance, it is appropriate, and in the Medical School this title may be used as provided in the special ordinances governing that department.

Article VI

Appointments

Section 1. Instructors, Assistants, Demonstrators, and Lecturers shall, in the absence of agreement to the contrary, be appointed annually,

with such compensation as shall be fixed by the Board of Trustees at the time of the appointment.

SEC. 2. Assistant Professors shall not be appointed for more than three years, subject to removal in accordance with the provisions of the charter of the University, and shall serve as Assistant Professors for at least three years before being eligible for promotion to a professorship.

SEC. 3. Professors shall be appointed without limit of time, subject to removal in accordance with the provisions of the charter of the University.

ARTICLE VII

Academic Year

SECTION 1. The academic year shall begin on the last Wednesday of September, and shall end on the Wednesday following the annual meeting of the Board of Trustees.

THE BOARD OF TRUSTEES

CHARLES HERBERT STOCKTON, LL.D.

President of the University

1916

HENRY GUSTAV BEYER, M.D., Ph.D., The Marlborough
*JAMES HOLDSWORTH GORDON, A.M., LL.B., 412 Fifth Street
ARCHIBALD HOPKINS, A.M., LL.B., 1826 Massachusetts Avenue
THOMAS SNELL HOPKINS, LL.B., Hibbs Building
WILLIAM BRUCE KING, A.M., LL.M., 1708 S Street
MARTIN AUGUSTINE KNAPP, A.M., LL.D., Southern Building
*ERNEST LAWTON THURSTON, C.E., A.M., 1414 Madison Street

1917

CHARLES BERGER CAMPBELL, Phar.D., M.D., 1731 Lamont Street
*HARRY CASSELL DAVIS, A.M., L.H.D., 1006 Massachusetts Avenue
WILLIAM JAMES FLATHER, Riggs National Bank
*JOHN B. LARNER, LL.B., LL.D., 900 F Street
HENRY BROWN FLOYD MACFARLAND, 1420 New York Avenue
WALTER RUPERT TUCKERMAN, A.B., LL.B., 816 Connecticut Avenue
HENRY WHITE, LL.D., 1624 Crescent Place

1918

*MELVILLE CHURCH, LL.M., 1608 Twentieth Street
GILBERT HOVEY GROSVENOR, A.M., 1328 Eighteenth Street
ABRAM LISNER, 1723 Massachusetts Avenue
*THEODORE WILLIAMS NOYES, A.M., LL.M., 1101 Pennsylvania Avenue
HENRY CLEVELAND PERKINS, 1701 Connecticut Avenue
ALPHEUS HENRY SNOW, A.B., LL.B., 2013 Massachusetts Avenue
MAXWELL VAN ZANDT WOODHULL, A.M., 2033 G Street

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*Nominated by the Alumni.

CHAIRMAN OF THE BOARD OF TRUSTEES

JOHN B. LARNER

VICE-CHAIRMAN OF THE BOARD OF TRUSTEES

ARCHIBALD HOPKINS

STANDING COMMITTEES OF THE BOARD OF TRUSTEES

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Finance.—W. J. FLATHER, M. VAN Z. WOODHULL, A. H. SNOW.
Subscriptions and Endowments.—A. LISNER, H. B. F. MACFARLAND, M. VAN Z. WOODHULL, A. HOPKINS, W. R. TUCKERMAN.
Honorary Degrees.—C. H. STOCKTON, A. HOPKINS, H. WHITE.
Columbian College.— H. C. DAVIS, J. H. GORDON, W. B. KING.
Engineering.—H. C. PERKINS, E. L. THURSTON, M. CHURCH.
School of Graduate Studies and Teachers College.—A. HOPKINS, H. G. BEYER, E. L. THURSTON.
Law.—J. B. LARNER, H. B. F. MACFARLAND, J. H. GORDON, W. B. KING.
Medicine, Dentistry, and Hospital.—H. G. BEYER, M. A. KNAPP, J. B. LARNER.
Associated Colleges.—T. S. HOPKINS, C. B. CAMPBELL, T. W. NOYES.

Counsel: CLEPHANE AND CLEPHANE.
Auditor: AMERICAN AUDIT COMPANY.

ADMINISTRATIVE OFFICERS

THE UNIVERSITY

President.—Charles Herbert Stockton, LL.D.
Secretary.—Richard Cobb, A.B.
Offices.—2023 G Street.
Treasurer.—Charles Wendell Holmes.
Office.—2024 G Street.
Librarian.—Alfred Francis William Schmidt, A.M.
Office.—2023 G Street.

DEPARTMENT OF ARTS AND SCIENCES

Dean.—Howard Lincoln Hodgkins, Ph.D.
Dean of Columbian College.—William Allen Wilbur, A.M.
Dean of the College of Engineering.—Howard Lincoln Hodgkins, Ph.D.
Dean of Teachers College.—William Carl Ruediger, Ph.D.
Recorder.—Eleanor Wilson Hance, S.M.
Offices.—2023 G Street.
Dean of the School of Graduate Studies.—Charles Edward Munroe, Ph.D., LL.D.
Office.—1325 H Street.

LAW SCHOOL

Dean.—Everett Fraser, A.B., LL.B.
Secretary.—William Cabell Van Vleck, A.B., LL.B.
Office.—New Masonic Building.

MEDICAL SCHOOL

Dean.—William Cline Borden, M.D.
Librarian.—Harry Knox Craig, M.D.
Offices.—1325 H Street.

DENTAL SCHOOL

Dean.—John Roland Walton, D.D.S.
Office.—1325 H Street.

NATIONAL COLLEGE OF PHARMACY

Dean.—Henry E. Kalusowski, M.D., Phar.D.
Office.—808 I Street.

COLLEGE OF VETERINARY MEDICINE

Dean.—David Eastburn Buckingham, V.M.D.
Office.—2113 Fourteenth Street.

PRESIDENT'S COUNCIL

(Arranged in Departmental Groups)

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RICHARD COBB, A.B.....Secretary of the University
CHARLES EDWARD MUNROE, Ph.D., LL.D.
Dean of the School of Graduate Studies
HERMANN SCHOENFELD, Ph.D., LL.D. ..... Professor of German
WILLIAM ALLEN WILBUR, A.M.....Dean of Columbian College
GEORGE NEELY HENNING, A.M.....Professor of Romance Languages
CHARLES SIDNEY SMITH, Ph.D.....Professor of Greek and Latin
HOWARD LINCOLN HODGKINS, Ph.D.,
Dean of the College of Engineering
EDWIN VIVIAN DUNSTAN, C.E.....Professor of Civil Engineering
WILLIAM CARL RUEDIGER, Ph.D.....Dean of Teachers College
ALFRED FRANCIS WILLIAM SCHMIDT, A.M.....Professor of German
EVERETT FRASER, A.B., LL.B.....Dean of the Law School
JOHN PAUL EARNEST, A.M., LL.M.....Professor of Law
ERNST OTTO SCHREIBER, JR., A.B., LL.B..Assistant Professor of Law
WILLIAM CLINE BORDEN, M.D.....Dean of the Medical School
SHEPHERD IVORY FRANZ, Ph.D.....Professor of Physiology
JOHN ROLAND WALTON, D.D.S.....Dean of the Dental School
HENRY CLAY THOMPSON, D.D.S.....Professor of Operative Dentistry
HENRY E. KALUSOWSKI, Phar.D.,
Dean of the National College of Pharmacy
DAVID EASTBURN BUCKINGHAM, V.M.D.,
Dean of the College of Veterinary Medicine

COMMITTEES OF THE PRESIDENT'S COUNCIL

Catalogue and Other Publications.—The President, the Secretary, Professors HODGKINS, WILBUR, and SWISHER.

Admissions.—Professors WILBUR, MUNROE, and RUEDIGER.

Schedule.—Professors HENNING, DUNSTAN, and RUEDIGER.

Library.—Professors SCHOENFELD, HENNING, the Librarian.

Summer School—Professors RUEDIGER, HODGKINS, WILBUR, HUNTER, and SCHREIBER.

Student Activities.—Professors FRASER, HENNING, RUEDIGER, KALUSOWSKI, BUCKINGHAM, STOUT, BASSETT, McNEMAR (Secretary) and DOUGHERTY.

Debating Council.—Professors SCHREIBER, PARKS, Messrs M. M. MARCUS, S. P. JONES, and H. W. HODGKINS.

UNIVERSITY MEMBERS OF FACULTIES AND TEACHING STAFF*

(Arranged with the exception of the President, in groups, in the order of appointment)

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Professor of Pediatrics and Clinical Professor of Medicine
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HENRY CRÈCY YARROW, M.D.....Professor of Dermatology, Emeritus
DANIEL KERFOOT SHUTE, A.B., M.D.,
Clinical Professor of Ophthalmology
HENRY CLAY THOMPSON, D.D.S.....Professor of Operative Dentistry
HERMANN SCHOENFELD, Ph.D., LL.D.....Professor of German
STERLING RUFFIN, M.D.....Professor of Medicine
CHARLES EDWARD MUNROE, Ph.D., LL.D.,
Dean of the School of Graduate Studies and Professor of Chemistry
GEORGE PERKINS MERRILL, Ph.D., Professor of Geology and Mineralogy
CHARLES WILLIAMSON RICHARDSON, M.D.,
Professor of Laryngology, Rhinology, and Otology
FRANK WIGGLESWORTH CLARKE, Sc.D., LL.D.,
Professor of Mineral Chemistry
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Dean of Columbian College and Professor of English
JOHN WESLEY BOVÉE, M.D.....Professor of Gynecology
THOMAS ASH CLAYTOR, M.D.....Clinical Professor of Medicine
AURELIUS RIVES SHANDS, M.D.....Professor of Orthopedic Surgery
CHARLES CLINTON SWISHER, Ph.D., LL.D.....Professor of History
RANDOLPH BRYAN CARMICHAEL, M.D.....Professor of Dermatology
FRANCIS RANDALL HAGNER, M.D.,
Professor of Genito-Urinary Surgery and Venereal Diseases
WALTER COLLINS CLEPHANE, LL.M.....Professor of Law
MITCHELL CARROLL, Ph.D.,
Professor of Archaeology and the History of Art

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*NOTE—In many instances members of the Teaching Staff give only part time to the University. For the names of the members of the Faculties and Teaching Staff of the Associated Colleges, see Part III of this catalogue.

PAUL BARTSCH, Ph.D.....Professor of Zoology
EDWIN CHARLES BRANDENBURG, LL.M.....Professor of Law
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Professor of Medical Jurisprudence
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JOHN PAUL EARNEST, A.M., LL.M.....Professor of Law
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Professor of Prosthetic Dentistry and Orthodontia
WILLIAM ALANSON WHITE, M.D.,
Professor of Psychiatry, and Clinical Professor of Neurology
ALBERT BURNLEY BIBB.....Professor of Architecture
ASAPH HALL, JR., Ph.D.....Professor of Astronomy
ALBERT MANN, Ph.D.....Professor of Botany
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Dean of the Medical School and Professor of Surgery
CHARLES STANLEY WHITE, M.D.,
Clinical Professor of Oral Surgery and Associate Professor of Surgery
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BUCKNER MAGILL RANDOLPH, M.D.,
Professor of Materia Medica and Therapeutics
LUTHER HALSEY REICHELDERFER, M.D.....Clinical Professor of Surgery
JAMES DUDLEY MORGAN, A.B., M.D.,
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Dean of Teachers College, and Professor of Educational Psychology
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Professor of Meteorological Physics
NOBLE PRICE BARNES, M.D.,
Professor and Associate Professor of Materia Medica and Therapeutics
GIDEON BROWN MILLER, S.B., M.D....Clinical Professor of Gynecology
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GEORGE WASHINGTON LITTLEHALES, C.E., Professor of Nautical Science
OSCAR BENWOOD HUNTER, M.D., Professor of Histology and Embryology
and Associate Professor of Anatomy
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OSCAR ALEXANDER MECHLIN, C.E.....Professor of Civil Engineering

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Clinical Professor of Laryngology and Otology
LOUIS MACKALL, M.D.....Clinical Professor of Medicine
CARL LAWRENCE DAVIS, M.D.....Professor of Anatomy
JOHN WILMER LATIMER, LL.B.....Professor of Law
EDWARD RHODES STITT, A.B., M.D.....Professor of Tropical Medicine
MERTON LEROY FERSON, A.M., LL.B. (On leave of absence 1915–16),
Professor of Law
RAY SMITH BASSLER, Ph.D.....Professor of Geology
FRANK LEECH, M.D.....Clinical Professor of Medicine
WILLIAM PHILLIPS CARR, M.D.....Clinical Professor of Surgery
HURON WILLIS LAWSON, S.M., M.D.....Professor of Obstetrics
FRANK ADELBERT HORNADAY, S.B., M.D.,
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Professor of Pharmacology and Associate Professor of Physiology
HENRY KNOX CRAIG, M.D.....Librarian, Medical School Library
and Curator of the Medical School Museum
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Professor of Economics Bacteriology and Pathology
ROBERT RUSS KERN, A.B.....Professor of Economics and Sociology
ALBERT LEWIS HARRIS, B. S. in Arch.....Professor of Architecture
ERNEST FROTHINGHAM KING, M.D.,
Clinical Professor of Genito-Urinary Surgery
EDWARD LYMAN MUNSON, A.M., M.D.,
Professor of Preventive Medicine
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JOHN RYDER WELLINGTON, M.D.....Clinical Professor of Surgery
DEWITT CLINTON CROISSANT, Ph.D. (From September 1, 1916)
Professor of English

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JOHN ROBERT DE FARGES, D.D.S.....Associate Professor of Dental
Metallurgy, Economics, Jurisprudence, and Ethics
CHARLES TURK BASSETT, D.D.S.,
Associate Professor in Charge of Dental Infirmary

WILLIAM FRANCIS LAWRENCE, D.D.S.,
Associate Professor of Prosthetic Technics
D. DE WITT BEEKMAN, D.D.S.,
Associate Professor of Materia Medica and Therapeutics
EUGENE ROGER STONE, D.D.S.....Associate Professor of Oral Surgery
and Demonstrator in the Dental Infirmary
JAMES WALTER BERNHARD, D.D.S.
Associate Professor of Crown and Bridge Work
WALTER LOWELL HAGAN, D.D.S.
Associate Professor of Operative Technics
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and Instructor in Pharmacology
CHARLES GARDNER SHOEMAKER, D.D.S.
Associate Professor of Operative Technics

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HARRY HAMPTON DONNALLY, A.M., M.D.,
Clinical Associate in Pediatrics
HENRY RANDALL ELLIOTT, M.D.....Associate in Physiology
J. LEWIS RIGGLES, M.D.....Associate in Gynecology
WILLIAM CABELL MOORE, M.D.,.....Associate in Medicine
CHARLES AUGUSTUS SIMPSON, M.D...Clinical Associate in Dermatology
COURSEN BAXTER CONKLIN, M.D.....Associate in Medicine

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NEVIL MONROE HOPKINS, Ph.D.....Assistant Professor of Chemistry
EDWIN ALLSTON HILL, Ph.D.....Assistant Professor of Chemistry
OTIS DOW SWETT, S.M, LL.M.....Assistant Professor of Chemistry
CHARLES WARD MORTIMER, S.B., M.E.,
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RICHARD COBB, A.B.,
Assistant Professor of English (To September 1, 1916) and
Secretary of the University
BEDFORD BROWN, B.S. in Arch. ....Assistant Professor of Architecture
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MORTON C. MOTT-SMITH, Ph.D.....Assistant Professor of Physics

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Assistant Professor of Law
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Assistant Professor of Mechanical Engineering
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EDWARD ROGERS NOYES, M.D.....Assistant Professor of Chemistry

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VIRGIL B. JACKSON, M.D.....Clinical Instructor in Gynecology
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Clinical Instructor in Surgery
WILLIAM J. FRENCH, M.D.....Instructor in Materia Medica
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Instructor in Medicine and Anaesthesia
JOHN WINSLOW TAYLOR, D.D.S.....Instructor in Prosthetic Technics
and Demonstrator in the Dental Infirmary
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HOMER GIFFORD FULLER, M.D.....Clinical Instructor in
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HAYNER HASKELL GORDON, E.E., Ph.D.,
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HARVEY LINCOLN CURTIS, Ph.D.....Lecturer on Physics
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Secretary of the Law School and Instructor in Law
MARIETTA STOCKARD, Lecturer on the Teaching of Children's Literature
DANIEL LERAY BORDEN, M.D.,
Instructor in Surgery and Clinical Instructor in Gynecology
ALBERT ELWOOD PAGAN, M.D.,
Instructor in Gynecology and Obstetrics
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Instructor in Botany
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HARRY SAMUEL LEWIS, M.D.....Clinical Instructor in Surgery
FRANK ROY RUTTER, Ph.D.....Lecturer on Commerce
DWIGHT GORDON SMITH, M.D.....Clinical Instructor in Medicine
JOHN HUNTER SELBY, M.D.....Instructor in Radiography
ROBERT S. TRIMBLE, M.D.....Clinical Instructor in Medicine
FRANK ANDREWS, A.B.....Lecturer on Transportation
WILLIAM BROWNE CARR, M.D. .....Instructor in Morbid Anatomy
HARRY A. BISHOP, M.D.....Clinical Instructor in Neurology
OLIVER CLEMENCE COX, M.D.....Instructor in Minor Surgery
WILLIAM BERRY MARBURY, M.D.....Instructor in Surgery
ALEXANDER WETMORE, A.B.....Instructor in Zoology
SACKS BRICKER, M.D.....Clinical Instructor in Obstetrics
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JOHN PRESTON MARSTELLER, D.D.S..Instructor in Prosthetic Technics
ORVILLE NEWTON FANSLER, D.D.S..Instructor in Prosthetic Technics
JASPER NEWTON ROBERTS, D.D.S....Instructor in Prosthetic Technics
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HENRY MERLE SPILLAN, D.D.S..Instructor in Crown and Bridge Work
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Clinical Instructor in Laryngology and Otology
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JAMES ROBERT SCOTT, M.D...Instructor in Bacteriology and Pathology
ARTHUR ALEXANDER EISENBERG, A.B., M.D.,
Instructor in Bacteriology and Pathology
(Mrs.) VICTORIA BRIGGS TURNER, A.B.....Assistant Librarian
LOUIS BERNARD CASTELL, M.D., Phar. D... Instructor in Pharmacology

GEORGE SARTON, D.Sc.....Lecturer on the History of Science
WILLIAM DARRACH HALSEY, A.B.,
Instructor in Mechanical Engineering
WILLIAM MILLER COLLIER, A.M.....Lecturer on Diplomacy
GEORGE WILLIAM RAMSEY, LL.B.....Instructor in Patent Law
CECIL KNIGHT JONES, B.Litt. (To September 1, 1916)
Instructor in Spanish
DELOS HAMILTON SMITH, B.S. in Arch.....Instructor in Architecture
JULES MAILLET.....Instructor in French Conversation
RICHARD KNIGHT THOMPSON, D.D.S.....Instructor in Metallurgy,
Instructor in Operative Technics and
Demonstrator in the Dental Infirmary
JAMES CHARLES HASSALL, M.D.,
Instructor in Psychiatry and Clinical Neurology
CHARLES ELMER RESSER, A.M.....Instructor in Geology
EVERETT MONROE ELLISON, A.M., M.D..Instructor in Pharmacology
J. WARD MANKIN, M.D.....Instructor in Pharmacology
WILLIAM DAVID TEWKSBURY, M.D.....Clinical Instructor in Medicine
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Lecturer on Law of Mining and Irrigation
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EDWIN ROSS TILLEY, D.D.S.....Instructor in Operative Technics
JOSEPH ALTSHULER FRIEDMAN, D.D.S.,
Instructor in Prosthetic Technics
JOSEPH DECATUR ROGERS, M.D.....Clinical Instructor in Surgery
JOSIAH BAKER HENNEBERGER, M.D..Clinical Instructor in Obstetrics
WALDO LASALLE SCHMITT, S.B.....Instructor in Zoology
HENRY GRATTAN DOYLE, A.M. (From September 1, 1916)
Instructor in Romance Languages
GERTRUDE RICHARDSON BRIGHAM, A.M.,
Instructor in English in the Summer School
WILLIAM CARSON RYAN, JR., A.B.,
Instructor in Education in the Summer School

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WILLIAM LAWRENCE WANLASS, A.B.....Assistant in History
HENRY ALBERT LEPPER, B.S. in Chem.....Assistant in Chemistry
BOYCE RICHARDSON BOLTON,
Student Assistant in Clinical Chemistry and Clinical Microscopy
THERESA KARGER.....Student Assistant in Chemistry
SAMUEL DANEMANN, D.D.S.....Demonstrator in the Dental Infirmary
GEORGE WASHINGTON PHILLIPS.....Student Assistant in Chemistry
HARRIET UNDERWOOD, A.B.....Laboratory Assistant in Psychology

VIVIAN CAMPBELL KELCHNER ROBEY...Student Assistant in Chemistry
META NEUMANN....Student Assistant in the Arts and Sciences Library
JAMES EDWIN HOUGHTON.....Student Assistant in Dental Histology
EDWARD JOHN COPPING.....Student Assistant in the Dental Infirmary
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LEON ANTHONY TASHOF.....Student Assistant in History
HOMER WILLIAM BALL.....Student Assistant in Physics
YETTA BREZ.....Student Assistant in Physics
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Student Assistant in Chemistry
HERBERT H. SHINNICK..... Student Assistant in Chemistry
BONIFANT HAMILTON.....Student Assistant in Chemistry
LEO MORTIMER TESCHE.....Student Assistant in Chemistry
PAUL HENRY BRATTAIN.....Student Assistant in Chemistry
EVERETT ALBERT HELLMUTH.....Student Assistant in Chemistry
HELEN GLADYS KAIN.....Student Assistant in Chemistry
JOHN BERTOLE ZERBE.....Student Assistant in Chemistry
THOMAS MOREN CAJIGAS.....Student Assistant in Chemistry
JOHN BLAKE COPPING.....Student Assistant in the Dental Laboratory
HANNAH LOUISE GARDNER.....Student Assistant in Chemistry
CLARK HOHMAN HUTTON.....Assistant Librarian in the Law School
GRACE D. HAYS.....Student Assistant in the Library
ANNA LEILA MCKNIGHT.....Teacher in the Demonstration School
HAROLD KEATS, A.B.....Assistant Librarian in the Law School
BEVERLY HUMPHREYS HARRIS.....Student Assistant in Architecture
GILBERT VERNON HARTLEY.....Student Assistant in Pharmacology
MARIE ELLEN GATCHELL.....Student Assistant in English

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The University comprises:

THE DEPARTMENT OF ARTS AND SCIENCES.

School of Graduate Studies.
Columbian College.
College of Engineering.
Teachers College.

THE PROFESSIONAL DEPARTMENTS.

Law School.
Medical School.
Dental School.

THE ASSOCIATED COLLEGES

National College of Pharmacy.
College of Veterinary Medicine.

ANNUAL COMMENCEMENT

The Annual Commencement is held on the Wednesday following the Wednesday nearest the first day of June. Students who have satisfied the requirements for degrees subsequent to the June Commencement may be awarded degrees at the Winter Convocation on February 22.

THE UNIVERSITY LIBRARY

The University Library comprises the Library of the Department of Arts and Sciences, the Law Library, and the Medical Library. It contains over 50,000 volumes.

In addition to its general collections the Library of the Department of Arts and Sciences contains the library of the late Professor Richard Heinzel, of the University of Vienna, containing 7200 books and pamphlets in Germanic philology and literature, and cognate branches; the library of the late Professor Curt Wachsmuth, of the University of Leipzig, containing 7900 books and pamphlets in Greek and Roman literature, archaeology, and history; the Mount Vernon Alcove containing 4000 volumes in political history, international law, and the social sciences; and the divisional collections in engineering and mechanic arts, architecture, and education. It is open from 9 a.m. to 6.40 p.m.

The Law Library, containing 7063 volumes, is open from 8.30 a.m. to 10 p.m.

The Medical Library, containing about 3000 volumes, is open from 9 a.m. to 9 p.m.

PRIVILEGES IN GOVERNMENTAL INSTITUTIONS OPEN TO UNIVERSITY STUDENTS

In order to promote research and the diffusion of knowledge, the Congress of the United States has made the scientific resources of the Government accessible to students under the terms of the following joint resolution, approved April 12, 1892:

"*Resolved by the Senate and House of Representatives of the United States of America in Congress assembled*, That the facilities for research and illustration in the following and any other governmental collections now existing or hereafter to be established in the city of Washington for the promotion of knowledge shall be accessible, under such rules and restrictions as the officers in charge of each collection may prescribe, subject to such authority as is now or may hereafter be permitted by law, to the scientific investigators and to students of any institution of

higher education now incorporated or hereafter to be incorporated under the laws of Congress or of the District of Columbia, to wit:

1. Of the Library of Congress.
2. Of the National Museum.
3. Of the Patent Office.
4. Of the Bureau of Education.
5. Of the Bureau of Ethnology.
6. Of the Army Medical Museum.
7. Of the Department of Agriculture.
8. Of the Fish Commission.
9. Of the Botanic Gardens.
10. Of the Coast and Geodetic Survey.
11. Of the Geological Survey.
12. Of the Naval Observatory."

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FACULTY

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Dean of the School of Graduate Studies and Professor of Chemistry
GEORGE PERKINS MERRILL, Ph.D., Professor of Geology and Mineralogy
FRANK WIGGLESWORTH CLARKE, Sc.D., LL.D.,
Professor of Mineral Chemistry
WILLIAM ALLEN WILBUR, A.M.,
Dean of Columbian College and Professor of English
CHARLES CLINTON SWISHER, Ph.D., LL.D... .....Professor of History
MITCHELL CARROLL, Ph.D.,
Professor of Archaeology and the History of Art
PAUL BARTSCH, Ph.D.....Professor of Zoology
GEORGE NEELY HENNING, A.M.....Professor of Romance Languages
ALBERT BURNLEY BIBB.. .....Professor of Architecture
ASAPH HALL, JR., Ph.D..... .....Professor of Astronomy
ALBERT MANN, Ph.D..... .....Professor of Botany
SHEPHERD IVORY FRANZ, Ph.D., L.L.D., M.D.,
Professor of Experimental Psychology
CHARLES SIDNEY SMITH, Ph.D.....Professor of Greek and Latin
WILLIAM CARL RUEDIGER, Ph.D.,
Dean of Teachers College, and Professor of Educational Psychology
ALFRED FRANCIS WILLIAM SCHMIDT, A.M.... .....Professor of German
WILLIS LUTHER MOORE, Sc.D., LL.D...Professor of Applied Meteorology
WILLIAM JACKSON HUMPHREYS, C.E., Ph.D.,
Professor of Meteorological Physics
EDWARD ELLIOTT RICHARDSON, M.D., Ph.D.....Professor of Philosophy
GEORGE WASHINGTON LITTLEHALES, C.E., Professor of Nautical Science
EDWIN VIVIAN DUNSTAN, C.E... .....Professor of Civil Engineering
OSCAR ALEXANDER MECHLIN, C.E.....Professor of Civil Engineering
RAY SMITH BASSLER, Ph.D.....Professor of Geology
ROBERT RUSS KERN, A.B.....Professor of Economics and Sociology
ALBERT LEWIS HARRIS, B.S. in Arch.....Professor of Architecture
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Professor of Preventive Medicine
DE WITT CLINTON CROISSANT, Ph.D.,
(From September 1, 1916), Professor of English

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EDWIN ALLSTON HILL, Ph.D.....Assistant Professor of Chemistry
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Assistant Professor of Electrical Engineering
HIRAM COLVER MCNEIL, Ph.D.,
Assistant Professor of Physical Chemistry
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LESLIE CLEVELAND MCNEMAR, A.B.,
(To September 1, 1916) Assistant Professor of Political Science
RICHARD COBB, A.B. (To September 1, 1916)
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NATHAN WASHINGTON DOUGHERTY, C.E., M.C.E.,
Assistant Professor of Civil Engineering
ROBERT WILBUR MORSE, S.B.,
Assistant Professor of Mechanical Engineering
MARK RITTENHOUSE WOODWARD, B.S. in E.E.,
Assistant Professor of Electrical Engineering
EDWARD ROGERS NOYES, M.D.....Assistant Professor of Chemistry
FREDERICK EUGENE FOWLE, JR., S.B.....Lecturer on Astro-Physics
WILLARD STANTON SMALL, Ph.D.....Lecturer on Education
HAYNER HASKELL GORDON, E.E., Ph.D.,
Instructor in Mechanical Engineering
HARRY GRANT HODGKINS, A.B.....Instructor in Mathematics
JULIA THECKLA MACMILLAN, S.M.....Instructor in Zoology
CHARLES EDWIN VAN ORSTRAND, S.M.....Lecturer on Mechanics
HARVEY LINCOLN CURTIS, Ph.D.....Lecturer on Physics
MARIETTA STOCKARD, A.B.,
Lecturer on the Teaching of Children's Literature
ARTHUR DEERIN CALL, A.M. .....Lecturer on Elementary Education
GEORGE TRAVER HARRINGTON, B.S. in Agr., B.S. in Chem.,
Instructor in Botany
EDWARD CULLOM, A.M. (To September 1, 1916)...Instructor in French
WALTON COLCORD JOHN, A.M. .....Instructor in Spanish
EDGAR LEE HEWETT, D.Soc.....Lecturer on Archaeology
LEONARD SMITH DOTEN, B.S. in C.E.....Instructor in Civil Engineering
FRANK ROY RUTTER, Ph.D.....Lecturer on Commerce
FRANK ANDREWS, A.B.....Lecturer on Transportation
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GEORGE SARTON, D.Sc.....Lecturer on the History of Science
WILLIAM DARRACH HALSEY.....Instructor in Mechanical Engineering
WILLIAM MILLER COLLIER, A.M.....Lecturer on Diplomacy
CECIL KNIGHT JONES, B.LITT. (To September 1, 1916)
Instructor in Spanish

DELOS HAMILTON SMITH, B.S. in Arch.....Instructor in Architecture
JULES MAILLET.....Instructor in French Conversation
CHARLES ELMER RESSER, A.M.....Instructor in Geology
WALDO LASALLE SCHMITT, S.B.....Instructor in Zoology
HENRY GRATTAN DOYLE, A.M. (From September 1, 1916)
Instructor in Romance Languages

Faculty of the School of Graduate Studies

President Stockton, Dean Munroe, Professors Hodgkins, Schoenfeld, Merrill, Clarke, Wilbur, Swisher, Carroll, Bartsch, Henning, Hall, Mann, Franz, Smith, Ruediger, Schmidt, Moore, Humphreys, Richardson, Littlehales, Dunstan, Mechlin, Bassler, Kern, Munson, Croissant; Assistant Professors Hopkins, Hill, Mortimer, McNeil, Alden, McNemar, Mott-Smith, Churchill, Noyes, Messrs. Van Orstrand, Curtis.

Faculty of Columbian College

President Stockton, Dean Wilbur, Professors Hodgkins, Schoenfeld, Munroe, Swisher, Carroll, Bartsch, Henning, Bibb, Smith, Ruediger, Schmidt, Richardson, Bassler, Kern, Croissant; Assistant Professors Swett, Alden, Cobb, McNemar, Mott-Smith, Dougherty, Woodward; Miss Macmillan, Messrs. Harrington, John, Rutter, Wetmore, Resser, Doyle.

Faculty of College of Engineering

President Stockton, Dean Hodgkins, Professors Schoenfeld, Munroe, Wilbur, Henning, Bibb, Schmidt, Dunstan, Bassler, Harris; Assistant Professors Swett, Mortimer, Alden, Brown, Dougherty, Morse, Mott-Smith, Woodward; Messrs. Gordon, Doten, Halsey, Smith, Resser, Doyle.

Faculty of Teachers College

President Stockton, Dean Ruediger, Professors Hodgkins, Schoenfeld, Munroe, Wilbur, Swisher, Bartsch, Henning, Smith, Schmidt, Richardson, Bibb, Croissant; Assistant Professors Alden, Cobb, McNemar, Mott-Smith; Messrs. Small, Call; Miss Stockard, Mr. Doyle.

SCHOOL OF GRADUATE STUDIES

HIGHER DEGREES

The higher degrees conferred in course by the University in this Division of the Department of Arts and Sciences are Master of Arts (A.M.), Master of Science (S.M.), Civil Engineer (C.E.), Electrical Engineer (E.E.), Mechanical Engineer (M.E.), and Doctor of Philosophy (Ph.D.).

ADMISSION

Candidates for admission to courses for higher degrees must make application to the Dean of the School of Graduate Studies on application blanks, which may be obtained of him or of the Secretary of the University. Candidates must present the diplomas they hold, or certificates that they have received such diplomas, together with catalogues of the institutions from which they hold their degrees and certificates of their course of study at such institutions. All such applications should be accompanied by testimonials as to character and scholarship.

DEGREES OF MASTER OF ARTS AND MASTER OF SCIENCE

To be admitted to candidacy for the Master's degree a student must have completed a liberal undergraduate course of study such as is required by colleges of good standing antecedent to the baccalaureate degree. The Faculty of Graduate Studies reserves the right to decide in all cases whether the antecedent training fulfills the requirements. Moreover, the course of study pursued must have been such as to qualify the candidate for pursuing the subjects chosen for the Master's or other higher degree sought. In seeking admission the applicant must state whether he desires to obtain the Specialist degree or the Liberal Culture degree.

The Specialist degree is designed for students who propose to proceed toward the Doctor of Philosophy degree. Such candidates are required to complete one major and two minor subjects selected from properly correlated and approved University subjects and to present a satisfactory thesis, all amounting in value to not less than fifteen units of work. Only one of the minor topics may be selected from the University subject which includes the major topic. Work for which this degree has been awarded may be credited as one year of work toward the Doctor of Philosophy degree, provided that it be in the same field of work.

The Liberal Culture degree is designed for students who do not intend to specialize in their work. Such candidates are required to complete a course of study amounting to not less than fifteen units of work distributed among three approved University subjects, not more than nine hours of which shall be given to any one subject. The candidate must also present a thesis in the field to which the major subject belongs which shall count for not more than three of the required fifteen units.

A candidate for a Master's degree must pass at least one full year in residence and study at this University, and no work done in satisfaction of the requirements for the Bachelor's degree shall be counted again for a higher degree.

HIGHER DEGREES IN ENGINEERING

To be admitted to candidacy for higher degrees in Engineering a student must have completed a liberal undergraduate course of study such as is required by colleges of good standing antecedent to the baccalaureate degree in Engineering, and of such a character as to fit him to pursue to advantage the study of advanced engineering topics. The Faculty of Graduate Studies reserves the right to decide in all cases whether the antecedent training fulfills the requirements. Moreover, the courses of study pursued for the Bachelor's degree must be approved by the Faculty as qualifying the candidate for pursuing the chosen line of study for the degree sought.

A candidate for a degree in Engineering shall pass at least one full year of residence and study at this University, sustain satisfactory examinations on the studies pursued, and present an acceptable thesis, together with a bibliography which shall count for not more than three units. Three approved full courses totaling with the thesis not less than fifteen units is the minimum required as constituting a full year's work.

DEGREE OF DOCTOR OF PHILOSOPHY

The degree of Doctor of Philosophy is conferred upon a student who has pursued specialized courses in University Subjects, has engaged in research under university auspices for a period of not less than three years, has submitted an acceptable thesis, and has met all the requirements prescribed. The degree is given for high attainments and proved ability to do research work in some special branch of knowledge, as determined by the various tests applied.

Before a student can be admitted to candidacy for this degree he must give evidence that he has completed a liberal undergraduate course of academic study such as is required by colleges of good standing antecedent to the baccalaureate degree, and of such a character as to fit him to pursue to advantage researches in the field chosen for his graduate work. The Faculty of Graduate Studies reserves the right to decide in all cases whether the antecedent training fulfills the requirements. The applicant may be credited with graduate work done at other universities, provided such work is shown to be of grade similar to that required here, but one year, preferably the last, must be spent in residence at this University and the other requirements of the degree as prescribed must be fulfilled.

The candidate for the Doctor's degree shall offer three topics from the University Subjects—one major and two collateral minor studies, one of which minors may be in the subject which includes the major topic. These must be pursued under the guidance of a committee con-

sisting of the professors in charge of the University Subjects in which the studies are pursued, with the professor in the major subject as chairman. This committee will determine his division of time, study, and research among the major and minor topics. The candidate shall pass satisfactory examinations upon the three subjects selected. He must satisfy the Faculty that he can read understandingly in the original, French and German works pertaining to his special field. In order to graduate the candidate must possess a broad acquaintance with his major subject and he must present a thesis upon some topic approved by the professor in charge of his major subject, which shall be a contribution to knowledge and which shall be accompanied by an adequate bibliography.

EXAMINATIONS

Candidates must pass examinations upon all their topics. The examinations upon the minor topics may be taken at the close of the respective years in which these topics are completed, or later, at the discretion of the examiner. The final examination on the major topic shall cover the candidate's entire university work, and shall be given when the professor of that subject is satisfied that the student has taken sufficient work to warrant such an examination being taken. If a candidate has satisfactorily passed his final examination, he may be permitted to complete his thesis away from the University.

DEFENSE OF THE THESIS

Before a candidate can be recommended to the Board of Trustees for the Doctor of Philosophy degree, he must have successfully defended his thesis in public before a Board of Experts not officially connected with the University. Before the candidate can be permitted to undertake the defense of his thesis, the thesis must have been favorably reported on and recommended for defense by the professor having supervision over the candidate's major topic, and by a co-referee appointed from the Faculty of Graduate Studies.

The subjects from which the candidate's selection may be made, as the Faculty may determine in each case, are as follows:

Applied Mathematics, Archaeology, Architecture, Astronomy, Astro-Physics, Bacteriology, Botany, Chemistry, Economics, Education, Civil Engineering, Electrical Engineering, Hydraulic Engineering, Mechanical Engineering, English, Ethics, Geology and Mineralogy, Germanic Languages and Literature, Greek Language and Literature, Histology, Embryology, History, History of Art, History of Science, International Law and Diplomacy, Latin Language and Literature, Law, Mathematics, Meteorology, Nautical Science, Paleontology, Pathology, Philosophy, Physics, Physiology, Pharmacology, Political Sciences, Preventive Medicine, Psychiatry, Psychology, Romance Language and Literature, Sociology, Zoology.

REGULATIONS REGARDING THESES

All theses in their final form must be presented to the Dean on the dates announced in the University Calendar. They must be typewritten on official thesis paper, which may be obtained from the Treasurer of the University. The thesis will be presented by the Dean to the Chairman of the Committee on the candidate and, also in the case of a thesis from a candidate for the Ph.D. degree, to the co-referee appointed from and by the Faculty for examination as to its merits when, on a favorable report by them, it may be defended in the Public Disputation. After their acceptance, theses, with their accompanying drawings, are the property of the University, and must be deposited in the University archives, but the authors of them are permitted to make copies. The candidate for the degree of Doctor of Philosophy shall arrange, to the satisfaction of the Faculty, to print his thesis under the supervision of the professor in charge of his major subject, within one year after the degree is granted, and he shall present one hundred copies to the University, to be distributed among institutions of learning.

DOCTORATE DISPUTATIONS

The Twenty-ninth Doctorate Disputation was held publicly on May 17, 1915. The theses that were successfully defended, the candidates and the members of the boards of experts were as follows:

Thesis: Investigation of the Halogen Derivatives of the Pyrazolons and the Determination of Antipyrine in Mixtures. By Samuel Palkin, Ph.B., 1910, Yale University. M.S., 1913, George Washington University. Before Chase Palmer, Ph.D., Chemist, U. S. Geological Survey; George Sarton, Sc.D., Formerly of the University of Ghent. Editor of Isis; Campbell Easter Water, Ph.D., Chemist, Bureau of Standards. Edwin Allston Hill, Ph.D., Assistant Professor of Chemistry, presiding.

Thesis: The Faith of a Stoic. By Ulysses Grant Baker Pierce, B.D., 1890, Hinsdale College, A.B., 1909, D.D., 1909, George Washington University. Before William Macon Coleman, Ph.D., Philosopher; Rev. James Stephen Lemon, Ph.D., Former Chaplain English Episcopal Church in Leipzig; Andrew Wilson, Ph.D., D.C.L., of the Washington Bar. Edward Elliott Richardson, Ph.D., Professor of Philosophy, presiding.

Thesis: Studies of the Functions of the Cerebral Motor Cortex of the Cat. By Joseph Duerson Stout, A.B., 1910, M.D., 1913, A.M., 1914, George Washington University. Before D. Percy Hickling, M.D., Professor of Nervous and Mental Diseases, Georgetown University; John Broadus Watson, Ph.D., Professor of Psychology, Johns Hopkins University; Thomas D. Woodson, M.D., Captain, Medical Corps, U.S.A. Shepherd Ivory Franz, Ph.D., Professor of Physiology and Experimental Psychology, presiding.

THE COLLEGES

The College session of 1916–17 begins Wednesday, September 27, 1916.
The Colleges are open to men and women.

ADMISSION

Every applicant for admission is required to present a testimonial of good character and also a certificate of standing and regular dismissal from the school or college which he has attended or from the tutor with whom he has studied.

Candidates for admission to the Freshman Class may present certificates of admission or take an examination in the required subjects. Certificates, in lieu of any or all examinations, will be accepted from schools whose work is attested by well-prepared students admitted to the University in previous years, and from schools that present evidence of affording adequate preparation in the required subjects. The Secretary of the University will, on application, furnish certificate blanks to the principals of such accredited schools.

The certificates of the College Entrance Examination Board will be accepted.

The requirement for admission is a four-year high-school course, or its equivalent, amounting to fifteen "units." For prescribed studies see the specifications of each college.

A unit represents a year's study in any subject in a secondary school, constituting approximately a quarter of a full year's work.

ENTRANCE EXAMINATIONS

The regular examinations for admission are held in May.
The following is the schedule for 1916:

Thursday, May 25, 1916

Elementary Latin	9.00–11.00
Plane Geometry	11.00– 1.00
Physics	2.00– 4.00
Greek	2.00– 5.00

Friday, May 26

Elementary Algebra	9.00–11.00
Elementary French	11.00– 1.00
Elementary German	2.00– 4.00
Ancient History	4.00– 6.00

Saturday, May 27

Plane Trigonometry	9.00–11.00
Advanced French, Advanced German	11.00– 1.00
English	2.00– 5.00

Monday, May 29

Advanced Algebra	9.00–11.00
Solid Geometry	11.00– 1.00
Chemistry; Advanced Latin	2.00– 4.00

Subjects offered for admission, but not named in the schedule of examinations, will be arranged for as occasion arises.

Unless admitted by certificate, every undergraduate candidate for a degree is required to pass an examination.

Candidates from the Washington high schools for the Kendall and the University Scholarships will be examined on nine and one-half units. These units upon which the examination will be given are the following: the specified subjects—English (three units), Mathematics (two and one-half units), and one other language (two units); the remaining two units will be in language, history, mathematics, physics, chemistry, biology—as the candidate shall elect. The remainder of the fifteen units must be certified from the high schools.

DEFINITION OF REQUIREMENTS

English

(Three units)

The requirement in English is that recommended by the National Conference on Uniform Entrance Requirements in English.

However accurate in subject matter, no paper will be considered satisfactory if seriously defective in punctuation, spelling or other essentials of good usage.

The examination will be divided into two parts:

1. Grammar and Composition

In grammar and composition, the candidate may be asked specific questions upon the practical essentials of these studies, such as the relations of the various parts of a sentence to one another, the construction of individual words in a sentence of reasonable difficulty, and those good usages of modern English, which one should know in distinction from current errors. The main test in composition will consist of one or more essays, developing a theme through several paragraphs; the subjects will be drawn from the books read, from the candidate's other studies, and from his personal knowledge and experience quite apart from reading. For this purpose the examiner will provide several subjects, perhaps eight or ten, from which the candidate may make his own selections. He will not be expected to write more than four hundred words per hour.

2. *Literature*

The examination in literature will include:

A. Reading.—General questions designed to test such a knowledge and appreciation of literature as may be gained by an intelligent reading of at least two books under each of five groups as follows: Group I—Classics in Translation (a selection from any other group may be substituted for this), Group II—Shakespeare, Group III—Prose Fiction, Group IV—Essays, Biography, etc., Group V—Poetry. Other books than those named in the Uniform Entrance Requirement list will be accepted under each group, provided the books are of standard literary character. The candidate will be required to submit a list of the books read in preparation for the examination, certified by the principal of the school in which he was prepared; but the books named in this list will not be made the basis of detailed questions.

B. Study.—The books provided for study are arranged in four groups, from each of which one selection is to be made.

GROUP I—DRAMA

Shakespeare: Julius Caesar, or Macbeth, or Hamlet.

GROUP II—POETRY

Milton: L'Allegro, Il Penseroso, and either Comus or Lycidas.
Tennyson: The Coming of Arthur, The Holy Grail, and The Passing of Arthur.
The selections from Wordsworth, Keats and Shelley in Book IV of Palgraves Golden Treasury (First Series).

GROUP III—ORATORY

Burke: Speech on Conciliation with America.
Macaulay's Two Speeches on Copyright, and Lincoln's Speech at Cooper Union.
Washington's Farewell Address and Webster's First Bunker Hill Oration.

GROUP IV—ESSAYS

Carlyle: Essay on Burns, with a selection from Burns's Poems.
Macaulay: Life of Johnson.
Emerson: Essay on Manners.

A test on the books prescribed under the *Study* groups will consist of questions upon their content, form, and structure, and upon the meaning of such words, phrases, and allusions as may be necessary to an understanding of the works and an appreciation of their salient qualities of style. General questions may also be asked concerning the lives

of the authors, their other works, and the periods of literary history to which they belong.

For the George Washington University Scholarship Entrance Examinations the books for *Reading* and *Study* will be the required English of the Washington High Schools.

Latin

Elementary (two units)

a. I. Latin Grammar: The inflections; the simpler rules for composition and derivation of words; syntax of cases and the verb; structure of sentences in general, with particular regard to relative and conditional sentences, indirect discourse, and the subjunctive.

II. Latin Prose Composition: Translation into Latin of detached sentences and easy continuous prose based on Caesar.

b. Caesar: Any four books of the Gallic War, preferably the first four.

Advanced (two units)

a. Cicero: Any six orations from the following list, but preferably the first six mentioned. The four orations against Catiline, Archias, the Manilian Law, Marcellus, Roscius, Milo, Sestius, Ligarius, the Fourteenth Philippic.

b. Virgil: The first six books of Æneid.

c. Advanced Prose Composition, consisting of continuous prose of moderate difficulty based on Cicero.

d. Sight Translation, based on prose of no greater difficulty than the easier portions of Cicero's orations.

Greek

Elementary (two units)

a. I. Greek Grammar: The topics for the examination in Greek grammar are similar to those detailed under Latin grammar.

II. Greek Prose Composition, consisting principally of detached sentences to test the candidate's knowledge of grammatical constructions. The examination in grammar and prose composition will be based on the first two books of Xenophon's Anabasis.

b. Xenophon: The first four books of the Anabasis.

Advanced (one unit)

a. Homer: The first three books of the Iliad (omitting II, 494, to end).

b. Sight Translation, based on prose of no greater difficulty than Xenophon's Anabasis.

French

Elementary (two units)

Candidates in Elementary French must have a good knowledge of the essential parts of grammar, with stress on pronouns and on regular verbs and the common irregular verbs. They must know the principles of pronunciation; must be able to translate simple English sentences or easy connected prose into French, and to translate accurately ordinary modern French prose. Candidates must have translated not less than 450 duodecimo pages by at least four different authors, of which amount at least one-third must be history. Candidates must have had a two-years' course of five periods per week.

Advanced (two units)

Candidates in advanced French must have partly translated, partly read, in addition to the requirements for Elementary French, at least 1000 pages of difficult French of several different authors, including history, fiction, drama, and poetry. Candidates must have had a four-years' course of five periods per week.

Fraser and Squair's French Grammar or Grandgent's Essentials of French Grammar is recommended.

Spanish

(Two units)

Candidates in Spanish must have a good knowledge of grammar, including syntax, with stress on pronouns and verbs, regular and irregular. They must know the principles of pronunciation. They must be able to translate simple English sentences or easy connected prose into Spanish, and to translate accurately fairly difficult modern Spanish prose and verse. Candidates must have translated not less than 500 pages by at least four different authors, of which amount at least one-fourth must be history or drama. Candidates must have had a two-years' course of five periods per week.

German

Elementary (two units)

Candidates in Elementary German must have had a two-years' course of five periods a week. They must be able to read fluently at sight and to translate easy narrative prose and poetry. An accurate knowledge of an elementary German grammar is requisite, to be tested by the translation into German of some fifteen sentences. About 300 pages of graduated narrative prose, one short play, and such poetry as is usually found in a First Reader will be considered an adequate preparation.

Advanced (two units)

Candidates in Advanced German must have had a four-years' course of five periods a week. They should be well trained in the syntactical laws of the language, have read about 800 pages of good literature in prose, preferably such prose works as are given in the Report of the Committee of Twelve of the Modern Language Association, and poetry, especially dramas by Lessing, Schiller, and Goethe, and studied an elementary history of German literature. German composition should comprise a number of short themes upon assigned historical or literary topics, lives of the authors read, etc.

History

In this subject special importance is attached to preparation in geography.

Ancient (one unit)

a. Greek History, through the Roman Conquest; as much as is contained in Myer's, Bottsford's, or West's History of Greece.

b. Roman History; as much as is contained in Allen's, Bottsford's or West's History of the Roman People.

Mediaeval and Modern European History (one unit)

As much as is contained in Myer's History of Mediaeval and Modern Europe.

English History (one unit)

As much as is contained in Larned's or Cheyney's History of England.

American History with the Elements of Civil Government (one unit)

As much as is contained in Fiske's History of the United States, and Fiske's Civil Government.

Mathematics

Elementary Algebra (one and one-half units)

I. Algebra to Quadratics: The four fundamental operations for rational algebraic expressions, factoring, highest common factor, lowest common multiple, complex fractions, the solution of equations of the first degree containing one or more unknown quantities, radicals, including the extraction of the square root of polynomials and numbers, and fractional and negative exponents.

II. Quadratics, etc.: Quadratic equations and equations containing one or more unknown quantities that can be solved by the methods of quadratic equations, problems depending upon such equations, ratio and proportion, and the binomial theorem for positive integral exponents.

Advanced Algebra (*one-half unit*)

The progressions; the elementary treatment of permutations and combinations; the use of four and five place tables and logarithms; undetermined coefficients; the elementary treatment of infinite series, the binomial theorem for fractional and negative exponents; the elementary treatment of the theory of equations.

Plane Geometry (*one unit*)

General text propositions, including the solution of simple original exercises and numerical problems.

Solid Geometry (*one-half unit*)

Properties of straight lines and planes, of dihedral and polyhedral angles, of projections, of polyhedrons, including prisms, pyramids, and the regular solids; of cylinders, cones, and spheres; of spherical triangles and the measurement of surfaces and solids.

Plane Trigonometry (*one-half unit*)

The definitions and relations of the six trigonometrical functions as ratios, proof of important formulas, theory of logarithms and use of tables, solution of right and oblique plane triangles.

Physics

(*One unit*)

It is recommended that the candidate's preparation should include:

a. Individual laboratory work, comprising at least thirty-five exercises well distributed over the subjects of physics.

b. Instruction by lecture-table demonstrations.

c. The study of at least one standard text-book, supplemented by the use of many and varied numerical problems. The metric system should be familiar to the student.

The laboratory note-book must be submitted for inspection, whether the candidate is admitted on certificate or by examination.

Chemistry

(*One unit*)

The candidate's preparation in chemistry should include:

a. Individual laboratory work, comprising at least forty experiments of a character analogous to those set forth by the College Entrance Examination Board. The laboratory note-book must be submitted for inspection.

b. Instruction by lecture-table demonstrations.

c. The study of at least one modern text-book.

Requirements.—The ground to be covered should include the following: The chief physical and chemical characteristics, the isolation and the recognition of the following elements and the preparation and study of their principal compounds: *Oxygen, hydrogen, carbon, nitrogen, chlorine, bromine, iodine, fluorine, sulphur,* phosphorus, silicon, potassium, *sodium,* calcium, magnesium, *zinc,* copper, mercury, silver, aluminum, *lead,* tin, *iron,* manganese, chromium.

The more detailed study should be confined to the italicized *elements* (as such) and to a restricted list of compounds, such as water, hydrochloric acid, carbon monoxide, carbon dioxide, oxides of nitrogen, nitric acid, ammonia, sulphur dioxide, sulphuric acid, hydrogen sulphide, sodium hydroxide, ammonium hydroxide.

Attention should be given to the atmosphere (constitution and relation to animal and vegetable life), flame, acids, bases, salts, oxidation and reduction, crystallization, combining proportions by weight and volume, calculations founded on these and on Boyle's and Charles' laws, symbols, formulas, equations and nomenclature, atomic theory, atomic weights, nascent state, natural groupings of the elements, solution (solvents and solubility of gases, liquids, and solids), strength of acids and bases, conservation and dissipation of energy, chemical energy and electrolysis, and of valence, electrolytic dissociation, osmosis, mass action in a very elementary way. Chemical terms should be clearly understood, and the student should be able to illustrate and apply the ideas that they embody. The theoretical topics are not intended to form separate subjects of study, but to be taught only so far as is necessary for the correlation and explanation of the experimental facts. The facts should be given as examples from various classes and not as isolated things.

Additional Subjects

Certificates will be accepted in botany, zoology, physiology, physiography, political economy, drawing, music, and other accredited subjects in secondary schools.

Manual-training High School Subjects

Technical subjects in manual-training high schools, or schools of similar grade, when duly certified, will be credited as follows:

Shopwork (not exceeding two units), domestic science and domestic art (not exceeding two units).

Business High School Subjects

Commercial subjects in business high schools or schools of similar grade, when duly certified, will be credited to the extent of four units.

ADMISSION TO ADVANCED STANDING

Candidates for admission to advanced classes in any department are examined in all indispensable preliminary studies.

Due credit is given for properly certified courses of study pursued in other colleges and universities.

SPECIAL STUDENTS

All the courses of instruction are open to students of suitable age and attainments who wish, without reference to any degree, to pursue special studies. Candidates must show that they are familiar with the subjects preliminary to the studies which they wish to pursue.

SCHOLARSHIPS AND PRIZES

Applications for scholarships should be filed with the Dean of the College in which the student is to register not later than September fifteenth. All Scholarships except the Kendall Scholarship and the University Scholarships are awarded for one year only but they may be renewed. Any student holding a scholarship who fails to obtain a general average of 85 per cent on the work of any term, or whose deportment is unsatisfactory, will be reported to the President's Council, and in the absence of extenuating circumstances the scholarship will be revoked. All designations to scholarships are awarded by the President's Council on the recommendation of a Dean.

Scholarships for Competition

The University offers the following scholarships to be awarded on competitive examination given at the time of the May entrance examinations. Holders of these scholarships are expected to pursue a regular course in one of the colleges of the Department of Arts and Sciences. No scholarship is awarded to a candidate whose examination average is below 80 per cent.

Kendall Scholarship.—The Kendall Scholarship, founded by the late Hon. Amos Kendall, is annually conferred on that member of the graduating class of any of the Washington High Schools who attains the highest average in the entrance examinations. This scholarship continues throughout the undergraduate course, and the student holding it pays only the matriculation, library, laboratory, and graduation fees.

University Scholarships.—The University offers also six scholarships, to be awarded annually to members of the graduating classes of any of the Washington High Schools. These scholarships continue throughout the undergraduate course, and students holding them pay only the matriculation, library, laboratory, and graduation fees.

Scholarships for Assignment

Davis Scholarship.—This is the income of a fund of one thousand dollars given to the University in October, 1869, by Hon. Isaac Davis, of Massachusetts.

Mary Lowell Stone Scholarship.—This scholarship was founded by a woman in memory of a woman student of science. It consists of a fund of two thousand dollars, the income from which is to be paid to needy women students of science in the University.

Maria M. Carter Scholarship.—This is the income of a fund of one thousand dollars given to the University in 1871 by Mrs. Maria M. Carter.

Farnham Scholarship.—This is the income of a fund of one thousand dollars given to the University in 1871 by Mrs. Robert Farnham.

Withington Scholarship.—This scholarship was founded in 1830, by the New York Baptist Theological Seminary, to be known as the Withington scholarship. It has an annual stipend in tuition fees of sixty dollars.

Walker Scholarship.—This scholarship was founded in 1824 by William Walker, Esq., of Putnam County, Georgia. It carries an annual stipend of one hundred dollars in tuition fees available for an undergraduate intending to enter the Christian ministry.

Morehouse Scholarship.—This scholarship was founded by Mr. A. Morehouse, of Washington, D. C., in 1861. It carries an annual stipend of sixty dollars in tuition fees available for an undergraduate intending to enter the Christian ministry.

Nellie Maynard Knapp Scholarship Fund.—Established in 1915 by the Columbian women in memory of its president, Mrs. Martin A. Knapp to provide scholarships for women. Application may be made to any of the Deans in the Department of Arts and Sciences.

Henry Harding Carter Scholarships.—These scholarships, founded by Mrs. Maria M. Carter in memory of her husband, Henry Harding Carter, consists of four scholarships of the annual value of fifty dollars each, and may be awarded to deserving students who are preparing for the civil engineering profession.

Admiral Powell Scholarships.—The Admiral Powell Scholarships were founded by Admiral Powell, U. S. Navy. The income from this endowment is for the "free education of such young men as may desire to take advantage of the said endowment by way of their preparation for entrance into the Naval Academy at Annapolis, Maryland, or such as may fit them to become mates or masters in the Merchant Marine Service of the United States," and of "such apprentices as, having filled their time in the great steam manufactory establishments of the country, may apply for appointment from civil life in the Steam Engineer Department of the United States Navy." The number of scholarships awarded each year will be determined by the income from the endowment. Each scholarship will entitle the beneficiary to free tuition for one year. Such special courses of study are offered to each student as will give him the

instruction needed to accomplish the purpose for which he is awarded the scholarship.

These scholarships are especially applicable to those who intend to come up for examination as warrant officers in the Engineer Department of the Navy, to warrant officers who are preparing for examination for appointment as Ensign, or to those who desire to fit themselves for responsible positions in the mercantile marine.

The subjects to be taken by a student will vary according to his preparation and according to the purpose for which he has been awarded the scholarship, but a year's work can be selected from the following topics:

	HOURS
Navigation and Nautical Astronomy	2
Algebra and Geometry	3
Trigonometry	1½
Mechanical and Machine Drawing	4
English	3
French	3
German	3
Spanish	3
International Law	3
Commercial Geography	1
Boilers and Power Plants	3
Mechanical Laboratory	2
Electricity	3
Electrical Engineering	6

Ministerial Aid.—The University authorizes the remission of a stated amount in tuition fees, to be called Ministerial Aid, which may be given to students, resident in the District of Columbia or its immediate vicinity in the regular courses of Columbian College, preparing for the ministry and not yet ordained. Any student receiving Ministerial Aid may be called upon for clerical or like work to the extent of not more than one hour a week for every ten dollars of tuition remitted, and of not more than four hours in any one week.

University Aid.—The University authorizes the remission of a stated amount in tuition fees, to be called University Aid, which may be loaned to undergraduate students in regular courses in the Department of Arts and Sciences, financially dependent on parents, who are residents of the District of Columbia or its immediate vicinity and whose circumstances warrant pecuniary assistance. Any student receiving University Aid is expected to repay it as soon as possible. In occasional instances he may be enabled, while still a student, to repay it in part or whole through clerical or like service rendered the University.

Columbian Women Loan Fund.—The Columbian Women have established a fund from which money is loaned to women students, preference being given to women who have already begun work in the University and who need assistance in continuing it. The administration of the fund remains with the Columbian Women.

PRIZES

(Only candidates for degrees may compete for these prizes)

Staughton and Elton Prizes.—The Staughton Prize, for excellence in the Latin Language and Literature, and the Elton Prize, for excellence in the Greek Language and Literature, founded by the Rev. Romeo Elton, D.D., of Exeter, England, consist of two gold medals, annually awarded to the best scholar in each of these languages.

Ruggles Prizes.—The Ruggles Prizes, for excellence in Mathematics, founded by Professor William Ruggles, LL.D., consist of two gold medals, annually awarded upon examination to the best two scholars in Mathematics.

Davis Prizes.—The Davis Prizes, for excellence in Elocution, founded by the Hon. Isaac Davis, LL..D, of Massachusetts, consist of three gold medals, annually awarded to the successful competitors in a public contest. Only members of the Senior Class are eligible to compete for these prizes.

Daughters of the American Revolution Prizes.—These prizes founded by the Daughters of the American Revolution of the District of Columbia, consist of two gold medals, awarded annually to the two students in the graduating class who, having maintained a high standing in the regular courses in Mediaeval, Modern European, English, and American History during three years, shall produce the best essays upon an assigned topic of American history.

The Thomas F. Walsh Prize.—This prize, established by Thomas F. Walsh, Esq., of Colorado, and based upon the income of one thousand dollars, consists of a gold medal awarded annually to that student of the graduating class who, having maintained a high standard in the regular classes of Mediaeval, Modern European, English, and American History, shall produce the best essay upon a designated period of the History of Ireland.

E. K. Cutter Prize.—The E. K. Cutter Prize in English was founded by the late Marion Kendall Cutter. The endowment is a fund of one thousand dollars, the income of which is given annually as a prize "for excellence in the study of English." The prize will be awarded to that member of the graduating class whose record in English, combined with general excellence, shows most marked aptitude and attainment in English studies.

Willie E. Fitch Prize.—The Willie E. Fitch Prize, for highest excellence in all branches of Chemistry, founded by James E. Fitch, Esq., in memory of his son, consists of fifty dollars, which is awarded annually for the best examination in Chemistry.

The Gardiner G. Hubbard Memorial Prize.—This is a prize in American History established by Mrs. Gertrude M. Hubbard in memory of her husband, the late Gardiner G. Hubbard. The endowment is a fund of one thousand dollars, the income from which is to be given annually to that member of the graduating class who has during four years main-

tained a high standing in the classes of American History, and who has produced the best essays upon subjects based upon a study of some assigned period of American history.

Muth Prize.—Geo. F. Muth and Company offer a set of drawing instruments to the student who makes the highest record in Mechanical Drawing. (Graphics 1.)

Colonial History Prize.—The Society of the Colonial Dames of America, Chapter III, offers annually a gold medal for excellence in American Colonial History. This prize will be awarded by the professor of History for general excellence in this subject as shown by class standing, by special essays, and by such other tests as shall be prescribed.

James Macbride Sterrett, Jr., Prize.—Founded by Professor James Macbride Sterrett in memory of his son, consists of a gold medal annually awarded to that student taking Course 1 in Physics who obtains the highest average in a special examination on a given subject and in the writing of an essay on an assigned topic.

The Chi Omega Prize in Philosophy.—An annual prize of fifteen dollars is offered by the Phi Alpha Chapter of the Chi Omega Fraternity for the best essay on a philosophical subject to be announced at the close of the preceding academic year by the Committee in charge. Essays must meet the requirements defined by the Committee and be submitted on or before April 1. Only women students who are members of a senior class in the Department of Arts and Sciences, and who are or have been registered in General Psychology, Logic, and the History of Philosophy, are eligible to compete.

Chi Omega Prize in Sociology.—An annual prize of fifteen dollars is offered by the Chi Omega Fraternity for the best essay on a sociological subject. All women students registered in the courses in Sociology are eligible to compete for this prize. The subjects of the essays are to be chosen by the competitors with the approval of the Professor of Sociology. The prize will be awarded by a committee of three, consisting of the Professor of Sociology, the Dean of Columbian College, and a third member selected by these two. Essays in competition for this prize must be submitted to the Professor of Sociology on or before the first of May.

Sigma Kappa English Prize.—An annual prize of a set of books to the value of ten dollars is offered by the Sigma Kappa Fraternity to the student passing the best examination in the year's work in English Rhetoric. All members of the classes in English Rhetoric are eligible for this special examination, which will be given during the final examinations.

Davis Prize Speaking

The Davis Prize Speaking is held on the Tuesday after the Easter holidays. The Davis Prizes were founded by Hon. Isaac Davis, of Massachusetts, in 1847. The original endowment was five hundred dollars, "proceeds of which will afford three premiums, in

cash or gold medals, of the value of five dollars, of ten dollars, and of fifteen dollars annually—these premiums or prizes to be distributed annually to such members of the Senior Class as shall have made the greatest progress in elocution since their connection with the College."

The award of these three prizes is determined by a public speaking contest, in which the participants deliver original orations. Senior students wishing to enter the competition should report to the Dean of Columbian College not later than five weeks before the contest, and submit their orations not later than three weeks before the contest. The prizes are awarded by a committee consisting of three members, selected by the Faculty of the Columbian College.

PRIZE AWARDS, 1914-1915

Ruggles Prize.—Joanna Elizabeth Best.
Staughton Prize.—Letitia Park Southgate.
Elton Prize—Dorothy McCleary.
Davis Prizes.—First Prize, Ralph Webster Benton; Second Prize, Ruth Leah Ayler; Third Prize, George Wilson Hodgkins.
Daughters of the American Revolution Prizes.—Mary Siphora Tyndall, Anna Washington Craton.
Thomas F. Walsh Prize.—Elizabeth Anna Weber.
James Macbride Sterrett, Jr., Prize.—Margaret Marian Browne.
E. K. Cutter Prize.—Ralph Webster Benton.
Sigma Kappa Prize.—Mabel Keenan.
Gardner G. Hubbard Prize.—Joseph Bush Kingsbury.
Colonial History Prize.—Fredrica Neumann.
Chi Omega Prize in Philosophy.—Elizabeth Anna Weber.
Chi Omega Prize in Sociology.—Flora Hull.
Muth Prize.—George A. Degnan.

HIGH SCHOOL SCHOLARSHIP AWARDS

Kendall Scholarship.—Eugenia B. Wiltberger, Central High School.
First University.—Ruth Sutherland Phillips, Central High School.
Second University.—Inez Buffington Ryan, Central High School.
Third University.—Hattie M. Wolf, Central High School.
Fourth University.—Mary Esther Petrie, McKinley High School.
Fifth University.—Jacob L. Lenovitz, Western High School.
Sixth University.—Gertrude E. Walter, Central High School.

COLLEGE CHAPEL

Chapel Services are held at 12.20 p.m., Monday, Wednesday, and Friday, throughout the academic year.

The Deans of the Colleges will confer with students as they may desire on questions concerning their welfare and will co-operate with them in all ways to make the college life one of personal helpfulness.

FEES

1. Matriculation fee (payable once)..... $5
2. Annual library fee..... 2
3. *Tuition fee per annum for each credit hour per week* of courses leading to the degrees of A.B., S.B., A.M., S.M., C.E., E.E., M.E..... 10
   The maximum fee charged in any one year is $150.
4. Tuition fee per annum for graduate courses leading to the degree of Ph.D..... 150
   Each separate topic..... 50
   Where candidates for higher degrees exceed the minimum time limit they may be liable for an additional charge of $50 per annum for each topic pursued by them.
5. Registration fee for students taking problems of the Beaux Arts Society..... 2
6. Laboratory courses:
   Material fees:
   Experimental Psychology..... 2
   Geology 1, Zoology, Botany, each..... 5
   Chemistry 2, 3, 7, and 28; Electrical Engineering; Physics, each..... 10
   Chemistry 4 (Assaying)..... 20
   Chemistry, except 2, 3, 4, 7, and 28, each..... 25
   Deposits to cover breakage of apparatus issued, the amount paid in excess of breakage to be returned:
   Chemistry, 2, 3, 7, and 28, each..... 10
   Chemistry, except 2, 3, 4, 7, and 28, each..... 25
7. Fee for graduation..... 10
8. Tuition fee for the following special course, not taken by candidates for a degree:
   Chemistry 4 (Assaying)..... 40
9. Fee for certificates under the seal of the University..... 2

No registration will be accepted for less than a half-year, and no change in the courses undertaken at the time of registration will be made unless approved by the Dean. *Withdrawals during a half-year will be granted only on recommendation of the Dean and the approval of the President.*

PAYMENT OF FEES

Matriculation, library, and other special fees, and laboratory deposits are due in full in advance. Tuition and laboratory material fees may be paid in monthly installments in advance. Students unable to pay their fees monthly in advance will be required to file an acceptable personal or corporate bond for $200 as security for future payment. In every instance all indebtedness must be discharged on or before May 1 of the current academic year. All fees are payable at the office of the Treasurer of the University, *2024 G Street.*

BOARD AND ROOMS

A register of boarding houses is kept by the Treasurer. Accommodations cost from $25 to $40 a month.

For catalogues, application blanks, and further information, address

THE SECRETARY,
The George Washington University,
2023 G Street, Washington, D. C.

COLUMBIAN COLLEGE

ADMISSION

Candidates for admission to the Freshman Class in Columbian College must meet the general admission requirements (p. 52) of fifteen units. A unit represents a year's study in any subject in a secondary school, constituting approximately a quarter of a full year's work. *The fifteen units of the entrance requirement must include English, 3 units; Mathematics, 2½ units; and one of the following languages: Latin, Greek, French, German, or Spanish, 2 units.* The remainder of the requirement is elective and may be satisfied in general by any accredited secondary school subjects.

For admission to advanced standing or as special students, see p. 60.

REQUIREMENTS FOR DEGREES

The undergraduate degrees offered by Columbian College are Bachelor of Arts, Bachelor of Science in Chemistry, and Bachelor of Science in Medicine. To be recommended for any one of these degrees, the student must be registered for at least one academic year in Columbian College; must satisfy the admission requirements, and must complete at least sixty "hours" of undergraduate courses. An "hour" of credit is one recitation or lecture a week or one laboratory period a week for one academic year. No time limit for the course is prescribed and the degree is given when the total of prescribed and elective studies is completed.

The class hours are so arranged that persons who can give only part time to college work may complete a full college course and obtain a degree. Such students usually take six years to complete the course. Classes in required and elective subjects are scheduled in the two class periods from five o'clock to six-forty. The drawing rooms and laboratories are open from nine o'clock in the morning until half past ten at night.

One grade of special distinction is recognized in awarding the bachelor's degree. It is shown by inserting the words "With Distinction" on the diploma after the name of the degree. It is awarded under the following conditions:

"That the names of all students who have received a mark of at least B (90 per cent) on courses representing at least sixty (60) per cent of all hours taken by them be submitted by the Dean to the Faculty of the Department in which the student shall be studying for a degree, after the completion of all final examinations in such students' final year of study for their degree;

"That the Faculty, after separate consideration of each individual case, shall, if it see fit, recommend the awarding of the degree 'With Distinction' to students who shall have fulfilled the conditions above specified."

FOR THE DEGREE OF BACHELOR OF ARTS

To be recommended for the degree of Bachelor of Arts, the student must complete courses of study amounting to at least sixty "hours" and including a group of prescribed subjects.

There are four curriculum groups each leading to the degree of Bachelor of Arts. Every candidate for the degree of Bachelor of Arts selects one of these groups, and thereafter he is not permitted to change to another group except on condition that he fulfill the requirements of the group to which he changes.

The studies of the last two years are elective, subject to such administrative supervision as will insure the general consistency and the liberal character of the courses selected.

The scope of the four curriculum groups is a provision alike for the diversity in the subjects of the secondary school curriculum leading to a college course, and the needs of the various graduate and professional courses of study in the University for which the college course is a preparation.

Group I emphasizes Latin and Greek studies, and it would naturally be taken by students whose preparatory work has included four years of Latin. Group II emphasizes the Modern Languages, affording to students whose preparation has not included Latin the humanistic influences of the literatures of the Modern Languages. Group III emphasizes Mathematics and the Natural Sciences, and would naturally be selected by the student whose college preparation has been scientific rather than literary. Group IV consists of such studies as would constitute needed preparation for the Department of Law, or further study in the political sciences.

(NOTE—Whenever in the following groups French or German is taken, if it is elementary, the same language shall be continued the succeeding year.)

Group I

	HOURS
English	6
History	3
Languages*	9
Latin	6
Mathematics	3
Psychology and Logic	3
Electives	30

* To be elected from Greek, French, German, or Spanish.

Group II

	HOURS
English	6
French	3
German	6
History	6
Mathematics or Science	3
Psychology and Logic	
Romance Language	3
Electives	30

Group III

	HOURS
English	3
History	3
Mathematics	6
Modern Languages	6
Psychology and Logic	3
Science	9
Electives	30

Group IV

	HOURS
Economics	3
English	3
History	6
Mathematics	3
Modern Languages or Latin	6
Political Science	6
Psychology and Logic	3
Electives	30

FOR THE DEGREE OF BACHELOR OF SCIENCE IN CHEMISTRY

Freshman Year

	HOURS
Chemistry, 1, 2	5
English, 1 or 2	3
Mathematics, 3 or 6	3
French or German	3
Architecture, 2	2

Sophomore Year

	HOURS
Chemistry, 3, 20	5
Modern Languages	3
Mathematics, 9 or 12	3
Physics, 1, 2	5

Junior Year

	HOURS
Chemistry, 21 (4) 23	6
Modern Languages	3
Mathematics, 20 or 21	3
Geology, 1	2
Economics, 33	2

Senior Year

	HOURS
Chemistry, 6, 24, 25, 26 or 27	9
Economics or History	3
Geology, 2	2

POLITICAL SCIENCE COURSES

Columbian College offers systematic instruction in the various branches of the political sciences.

The courses are designed to impart general culture and a broad grasp of public questions, and thus to provide a training that will prove of value in commercial life, the practice of law, or public service. The work prescribed is broader than the requirement for entrance into the Consular and Diplomatic Service, so that the student who completes with credit the appropriate courses has a training that will fit him to rise to the higher positions in the service to which he may be appointed.

Regular students who are preparing for the Government Service should register for Group IV of the curriculum requirements for the degree of Bachelor of Arts, and should elect, also, the subjects named in Section 2 of the "Regulations Governing Examinations Promulgated by the Board of Examiners, December 13, 1906."

Special students who are preparing for the Consular Service examinations should register for such courses as relate to subjects named in Section 2, of the Government Regulations.

REGULATIONS GOVERNING EXAMINATIONS PROMULGATED BY THE BOARD OF EXAMINERS, DECEMBER 13, 1906

Section 2 reads as follows: The examinations will consist of an oral and a written one, the two counting equally. The object of the oral examination will be to determine the candidate's business ability, alertness, general contemporary information, and natural fitness for the service, including moral, mental, and physical qualifications, character, address, and general education and good command of English. In this part of the examination the applications previously filed will be given due weight by the Board of Examiners, especially as evidence of the applicant's business experience and ability. The written examination will include those subjects mentioned in the Executive order, to wit, at least one modern language other than English—French, German, or Spanish;* the natural, industrial, and commercial resources and the

*As amended by the Board of Examiners, February 18, 1911.

commerce of the United States, especially with reference to possibilities of increasing and extending the foreign trade of the United States; political economy, and the elements of international, commercial, and maritime law. It will likewise include American history, government, and institutions; political and commercial geography; arithmetic (as used in commercial statistics, tariff calculations, exchange, accounts, etc.); the modern history, since 1850, of Europe, Latin America, and the Far East, with particular attention to political, commercial, and economic tendencies. In the written examination, composition, grammar, punctuation, spelling, and writing will be given attention.

Students who seek a designation for consular and diplomatic examination should apply to the Department of State for full information. Consular service examinations are held in Washington only.

SUGGESTED COURSE FOR THE POLITICAL SCIENCE STUDENT FOR THE DEGREE OF BACHELOR OF ARTS

First Year

	HOURS
Economics 1 or 2 (General Economics)	3
English 1 or 2 (English Rhetoric)	3
French	3
History 1, 2 or 5, 6 (Mediaeval History)	3
Mathematics, 3 or 6	3

Second Year

Economics 22, 23 (General Sociology, Modern Social Problems)	2
French	3
German	3
History 3, 4 or 31, 32 (Modern European); 33 (Current History)	4
Political Science, 1, 21 or 2, 27	3

Third Year

Economics, 26, 27 (Public Finance, Money and Banking)	2
Economics 36 (Commercial Geography and Economic Resources)	2
French or Spanish	3
German	3
History (American or English)	3
Political Science, 2, 27 or 1, 21	3

Fourth Year

Economics, 33 (Commercial and Maritime Law)	2
Economics 38, 37 (International Commercial Policy; Transportation)	2
Economics 40, 41 (Economic History of the United States; Statistics)	2

	HOURS
History (English or American)	3
Political Science, 28, 31	3
Political Science 29, 30 (International Law and Elements of Diplomacy)	3
Psychology and Logic	3

PRE-MEDICAL COURSES

To meet the preliminary requirements for medical education, Columbian College offers the following courses: A *one-year pre-medical course* satisfying the requirement of the American Medical Association for admission to the Medical School; a *six-year combination course*, consisting of two years in Columbian College and four years in the Medical School for which the degrees of Bachelor of Science in Medicine and Doctor of Medicine are given; and a *seven-year combination course*, consisting of three years in Columbian College and four years in the Medical School, for which the degrees of Bachelor of Arts and Doctor of Medicine are given.

ADMISSION TO THE MEDICAL SCHOOL

The Medical School of the George Washington University in the classification of the Council of Medical Education is one of the "Class A" medical colleges.

The minimum requirement for admission to the Medical School is one year of college work, totaling not less than fifteen credits, including physics, chemistry, and biology. It is strongly urged that the year's work also include three credits in a modern language other than English, preferably German or French. The college year must be preceded by fifteen units of secondary school work made up as follows:

The fifteen units of the entrance requirements must include English, 3 units; Algebra, 1½ units; Plane Geometry, 1 unit; German or French, or Latin or Greek, 2 units; History, 1 unit. The remainder of the requirement is elective and may be satisfied in general by any secondary school subjects accredited by the Council on Medical Education.

One-Year Pre-Medical Course in Columbian College

Candidates for the one-year pre-medical course for admission to the Medical School should register in Columbian College for the following courses:

Physics 3 (lectures)	3 hours
Physics 2 (laboratory)	2 periods
Chemistry 1 (lectures)	3 hours
Chemistry 2 (laboratory)	2 periods
Zoölogy 3 (lectures and laboratory)	4 periods
German or French	3 hours
Total	17

Six-Year Course for the Degrees of Bachelor of Science in Medicine and Doctor of Medicine

Regular students in this course will complete two years of work amounting to thirty-seven prescribed hours in college, at least six hours of which must be taken in Columbian College, and the four-year course in the Medical School. On the completion of this six-year course, the student will receive at the same time the degrees of Bachelor of Science in Medicine and Doctor of Medicine. The curriculum requirement for this combined six-year course is as follows:

Biological Sciences:	HOURS
Zoölogy 1	3
Zoölogy 2	3
Botany 1	3
Chemistry 1, 2	5
Physics 3 and 2	5
English 1 or 2	3
German or French or Spanish	6
History	3
Mathematics 3 or 6	3
Psychology and Logic	3
Total	37

Seven-Year Course for the Degrees of Bachelor of Arts and Doctor of Medicine

Professional courses in Medicine will be credited towards the degree of Bachelor of Arts to the extent of fifteen hours. On the completion of forty-five hours of credit in Columbian College including all of the required subjects in some one of the curriculum groups and in addition all the pre-medical subjects, and on the completion of the first year of the regular course in the Medical School, the student will receive the degree of Bachelor of Arts. This combined course contemplates three years of college study—at least six hours of which must be taken in Columbian College, and four years in the Medical School. The effect is to shorten the period of study for the two degrees one year.

COMBINED COLLEGE AND LAW COURSES

Professional courses in Law will be credited towards the degree of Bachelor of Arts to the extent of fifteen hours. On the completion of forty-five hours of work in college, at least six hours of which must be taken in Columbian College, including all of the required subjects in some one of the curriculum groups, and of the first year of the regular course in the Law School, the student will receive the degree of Bachelor of Arts. This combined course contemplates three years of study in Columbian College and three years in the Law School. The effect is to shorten the period of study for the two degrees one year.

SCHEDULE OF SUBJECTS FOR THE FIRST TWO YEARS

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
9.15	Math. 3	English 3 French 1	Math. 3	English 3 French 1	Math. 3	English 3 French 1
10.15	French 3 Math. 9 Phil. 1, 3 Spanish 3	English 1 Greek B Physics 2 Political Science 1, 4	French 3 Math. 9 Phil. 1, 3 Spanish 3	English 1 Greek B Physics 2 Political Science 1, 4	French 3 Math. 9 Phil. 1, 3 Spanish 3	English 1 Political Science 1, 21
11.15	Econ. 1 German 3 Greek 2	Astron. 1 German 1 Physics 2	Econ. 1 German 3 Greek 2	Astron. 1 German 1 Physics 2	Econ. 1 German 3 Greek 2	German 1
1.45	German 5 Graphics 1 Latin 2 Physics 3 Spanish 1	Chem. 2 Chem. 3 Chem. 7	German 5 Graphics 1 Latin 2 Physics 3 Spanish 1	Chem. 2 Chem. 3 Chem. 7	German 5 Latin 2 Physics 3 Spanish 1	
2.45	Graphics 1 Greek 1 Hist. 1, 2	Chem. 2 Chem. 3 Chem. 7	Graphics 1 Greek 1 Hist. 1, 2	Chem. 2 Chem. 3 Chem. 7	Greek 1 Hist. 1, 2	
3.45	French 5 Graphics 1 Hist. 3, 4 Latin 1	Chem. 2 Chem. 3 Chem. 7	French 5 Graphics 1 Hist. 3, 4 Latin 1	Chem. 2 Chem. 3 Chem. 7	French 5 Hist. 3, 4 Latin 1	
5.00	English 2 Geology 1 Math. 4 Physics 1 Phil. 2, 4 Spanish 2 Zoology 1 Zoology 3	English 5 Botany 1 Chem. 1 French 4 German 2 German 8 Spanish 4	English 2 Geology 3 Math. 4 Physics 1 Phil. 2, 4 Spanish 2 Zoology 1 Zoology 2	English 5 Botany 1 Chem. 1 French 4 German 2 German 8 Spanish 4	English 2 Geology 1 Math. 4 Phil. 2, 4 Physics 1 Spanish 2 Zoology 1 Zoology 2	Botany 1 Chem. 1 French 4 German 2 German 8 Spanish 4
5.50	Econ. 2 English 4 French 2A Geology 2 German 4 Math. 12A Math. 6 Zoology 2	Botany 1 Chem. 6 French 2B French 6 German 6 Hist. 5, 6 Math. 12B	Econ. 2 English 4 French 2A German 4 Math. 12A Math. 6 Zoology 1 Zoology 2	French 2B French 6 German 6 Hist. 5, 6 Math. 12B	Econ. 2 English 4 French 2A Geology 2 German 4 Math. 12A Math. 6 Zoology 1 Zoology 2	Botany 1 French 2B French 6 German 6 History 5, 6 Math. 12B

COLLEGE OF ENGINEERING

ADMISSION

Candidates for admission to the Freshman Class in the Engineering Courses are required to present fifteen units for admission, distributed as follows:

	UNITS
English	3
French, German or Spanish	4
Plane and Solid Geometry	1½
Elementary and Advanced Algebra	2
Plane Trigonometry	½
Chemistry	1
Physics	1
Electives	2
Total	15

NOTE.—The modern language requirement may be satisfied by presenting four units in one language, or two units in each of two languages. Students who present four units in one language will study a second language two years in College. Students who present two units in each of two languages will study each language one year in College.

Candidates for admission to the Freshman Class in the Architectural Course are required to present fifteen units for admission, distributed as follows:

	UNITS
English	3
French, German or Spanish	2
Plane and Solid Geometry	1½
Elementary and Advanced Algebra	2
Plane Trigonometry	½
Electives	6
Total	15

For detailed descriptions of the requirements in each preparatory subject see pages 52-62.

For admission to advanced standing or as a special student, see page 60.

COURSES FOR A DEGREE

Four courses of study are offered:

I. Civil Engineering.
II. Electrical Engineering.
III. Mechanical Engineering.
IV. Architecture.

These courses occupy four years each, and lead to the degree of Bachelor of Science in Civil Engineering, in Electrical Engineering, in Mechanical Engineering, and in Architecture, respectively. Graduate courses of one year under the Faculty of Graduate Studies of the George Washington University are open to those who receive the above engineering degrees, and lead, respectively, to the degrees of Civil Engineer, Electrical Engineer, and Mechanical Engineer.

The class hours are so arranged that persons who can give only part time to college work may complete a full engineering course and obtain a degree. Such students usually take six years to complete the course. Classes in all the general studies of the engineering courses and in many of the technical subjects are regularly scheduled in the two class periods from five o'clock to six-forty; and other technical courses are given in alternate years in these periods. The drawing rooms and laboratories are open from nine o'clock in the morning until half past ten at night.

REQUIREMENTS FOR A DEGREE

The arrangement of the topics in each of the regular courses for degree is shown below. The numbers following the names of subjects refer to the courses as given in the list of Department Subjects on pages 85–121, to which reference should be made for more complete description.

COMMON TO ALL ENGINEERING COURSES

Freshman Year

Chemistry, 1, 7.
General Chemistry and Qualitative Analysis.
English, 1 or 2.
Rhetoric.
French, German or Spanish.
Graphics, 1.
Mechanical and Freehand Drawing.
Mathematics, 9 or 12.
Trigonometry; Analytic Geometry.

CIVIL ENGINEERING COURSE

Sophomore Year

Civil Engineering, 1, 3, 4.
Surveying; Highway Engineering; Materials of Construction.
French, German or Spanish.

Graphics, 8.
Descriptive Geometry.
Mathematics, 20 or 21.
Calculus.
Physics, 1, 2.
General Physics; Laboratory Physics.

Junior Year

Applied Mathematics, 20, 22.
Mechanics; Mechanics of Materials.
Astronomy, 2.
Practical Astronomy.
Chemistry, 6.
Metallurgy.
Civil Engineering, 2, 22, 26.
Railroad Engineering; Theory of Structures: Testing Materials.
Electrical Engineering, 6.
Industrial Electricity.
Geology, 2.

Senior Year

Applied Mathematics, 21.
Hydraulics.
Civil Engineering, 20, 21, 23, 24.
Masonry; Hydraulic Engineering; Theory of Structures; Sanitary Engineering.
Economics, 33.
Commercial Law.

ELECTRICAL ENGINEERING COURSE

Sophomore Year

French, German or Spanish.
Graphics, 2, 8.
Advanced Mechanical Drawing; Descriptive Geometry.
Mathematics, 20 or 21.
Calculus.
Mechanical Engineering, 1.
Mechanism.
Physics, 1, 2.
General Physics; Laboratory Physics.

Junior Year

Applied Mathematics, 20, 22.
Mechanics; Mechanics of Materials.
Chemistry, 6.
Metallurgy.

Economics, 33.
Commercial Law.
Electrical Engineering, 1, 2, 4, 5.
Elementary Electricity and Electrical Engineering; Electrical Measurements; Electrical Engineering Laboratory
Mechanical Engineering, 20, 21.
Steam Engineering; Boilers.

Senior Year

Applied Mathematics, 21.
Hydraulics.
Civil Engineering, 5, 6.
Surveying Instruments; Foundations.
Electrical Engineering, 8, 21, 22, 23, 24, 26, 27.
Electrical Designs; Alternating Currents; Electrical Distribution; Electrical Applications; Electrical Engineering Laboratory; Electric Lighting; Electric Railways.
Mechanical Engineering, 10, 23.
Engineering Laboratory; Hydraulic Machinery.

MECHANICAL ENGINEERING COURSE

Sophomore Year

French, German or Spanish.
Graphics, 2, 8.
Advanced Mechanical Drawing; Descriptive Geometry
Mathematics, 20 or 21.
Calculus.
Mechanical Engineering, 1.
Mechanism.
Physics, 1, 2.
General Physics; Laboratory Physics.

Junior Year

Applied Mathematics, 20, 22.
Mechanics; Mechanics of Materials.
Civil Engineering, 22.
Theory of Structures.
Economics, 33.
Commercial Law.
Mechanical Engineering, 6, 9, 20, 21, 24, 28.
Engineering Drawing; Engineering Laboratory; Steam Engineering; Boilers; Cotton Machinery and Machine Tools; Industrial Management.

Senior Year

Applied Mathematics, 21.
Hydraulics.

Chemistry, 6.
Metallurgy.
Civil Engineering, 5, 6.
Surveying Instruments; Foundations.
Electrical Engineering, 7.
Dynamos and Motors.
Mechanical Engineering, 7, 10, 22, 23, 26, 27, 29.
Machine Design; Engineering Laboratory; Gas Engines; Hydraulic Machinery; Dynamics of Machinery; Power Plant Design; Heating and Ventilating.

COURSE IN ARCHITECTURE

Freshman Year

Architecture, 2, 3, 4.
Free-hand Drawing; Architectural Drawing and Elementary Design; Projections, Shades. Shadows and Perspective.
English, 1 or 2.
Rhetoric.
French.
Mathematics, 9 or 12.
Trigonometry; Analytic Geometry.

Sophomore Year

Architecture, 5, 6, 8.
Architectural Design; Free-hand Drawing; History of Architecture.
English, 3 or 4.
Humanistic Studies.
French.
Geology, 2.

Junior Year

Architecture, 20, 21, 22, 24, 25, 33.
History of Architecture; Building Construction; Sanitation; Pen and Ink Rendering; Design; Water Color.
Physics, 1 or 3.
General Physics.

Senior Year

Architecture, 27 or 37, 28, 39, 40, 41, 43, 44.
Design; History of Painting and Sculpture; Building Construction; Water Color; Heating and Ventilating; Office Practice; Advanced Construction.
Economics, 33.
Commercial Law.
Electrical Engineering, 26.
Electric Lighting and Illumination.

TEACHERS COLLEGE

The purpose of Teachers College is to provide (*a*) collegiate training for teachers, (*b*) instruction in education as a department of science.

The aims of the Teachers College may be summarized as follows:

a. To promote the knowledge of educational science.

b. To fit students for the higher positions in the public school service.

c. To secure to teaching the rights and prerogatives of a profession.

d. To aid in raising the standards of educational practice, and so to increase the efficiency of public education.

ORGANIZATION

Teachers College provides a four years' college course, the first two years of which are devoted to a foundation of general culture courses, and the last two to the professional courses and to specialization in the subjects which the student expects to teach. The schedule of courses is arranged so as to meet the convenience of both full time and part time students. Teachers in the schools of Washington and vicinity may complete all the requirements for a degree without giving up their positions.

ADMISSION

Candidates for admission to the Freshman Class in Teachers College must meet the general admission requirements (p. 52) of fifteen units. *Three of these must be in English, two and one-half in Mathematics, and two in one of the following languages: Latin, Greek, French, German, or Spanish.* The remainder of the required fifteen units may be satisfied by any accredited secondary subjects.

Persons desirous of taking one or more of the professional courses, without becoming candidates for a degree, may be admitted as *special students* on the presentation of satisfactory evidence that they are qualified to pursue the work to advantage.

ADVANCED STANDING

Students transferring from normal schools, colleges, and other schools of similar rank will be admitted to such advanced standing as the courses they have pursued warrant. Graduates of normal schools whose courses rest upon graduation from an approved four-year high school are granted twenty-four hours of advanced standing.

For further information concerning admission as special student or to advanced standing, see p. 60.

GRADUATION

On the completion of courses of study aggregating at least sixty-two hours, the University confers the degree of Bachelor of Arts and a Bachelor's Diploma in Education. (An "hour" of credit is one recitation or lecture a week or one laboratory period a week for one academic year.) These courses are partly prescribed and partly elective, and the degree is conferred when the necessary work is completed, no time limit being set. The prescriptions are as follows:

a. In general culture subjects:

	HOURS
Biology*	3
English	3
Foreign Language*	6
History*	6
Psychology and Logic	3
Philosophy	3

*For the subjects marked with an asterisk (*) electives may be substituted to the extent that approved secondary school work has been done in them. The foreign language requirement must fall in one language, while in history it is required that a survey of the world's history be obtained.

b. In professional subjects ten hours are required of which the following seven are prescribed, although teachers of experience may receive credit for Observation and Practice Teaching.

	HOURS
History of Education	2
Principles of Education Principles of Teaching	2
School Hygiene	1
Observation and Practice Teaching	2

c. All regular students must complete before graduation at least nine hours in a major, and at least five hours in a minor subject, in addition to the first required course, if any, in the same subject.

THE TEACHER'S DIPLOMA

The Bachelor's Diploma in Education is granted in connection with the Bachelor of Arts degree (or, to students without experience in teaching, in connection with higher degrees) upon the fulfillment of the following condition: (1) The student must have satisfactorily completed the courses of study defined above. (2) He must, in the judgment of his instructors, also possess other qualifications essential to success in teaching.

A diploma corresponding to the degree is given also in connection with higher degrees, provided a graduate student has taken a major or minor

in Education, has satisfied the requirements *a*, *b* and *c* above, and has had at least two years of successful experience in teaching.

A student holding a degree from an approved college or university may, by satisfying requirements *a*, *b*, and *c* above, earn a diploma without registering for a degree.

OBSERVATION AND PRACTICE TEACHING

A demonstration school which provides ample opportunities for teaching under actual school conditions is being conducted in Saint John's Church Orphanage. The student-teachers are given full responsibility in government and instruction. Through the courtesy of the officials of the public schools, these opportunities are supplemented by systematic observation in the high and elementary schools of Washington.

EXPERIMENTAL WORK

Teachers College maintains a psychological laboratory for introductory experimental work. The equipment is specially adapted to the investigation of problems of interest to students of education.

The school system of a large city, moreover, offers abundant opportunity for observation, and for the study of methods and other practical educational problems.

TEACHERS APPOINTMENT BUREAU

Teachers College maintains a Teachers Appointment Bureau for the purpose of aiding students who are studying, or have studied, in the University, to secure positions as teachers. This service is performed gratuitously, in the interest both of students and of superintendents of schools and boards of education wishing to employ teachers.

COURSES OF INSTRUCTION

PROVIDED BY THE DEPARTMENT OF ARTS AND SCIENCES

Courses of instruction are divided into three sections.

First-section courses may be taken by third or fourth year students only by permission of the Dean and the professor in charge of the subject. They may sometimes be recommended to graduate students, but are not counted toward the higher degrees. The courses in the second section are in general for advanced students, candidates for the bachelor's degree; they serve, however, with additional work, as minors for the higher degrees, provided they have not already counted toward a degree. They may be taken by students in the second year of their course only by special permission of the professor in charge. The courses in the third section are in general for graduate students only, candidates for one or other of the higher degrees. They are open to undergraduates only on the recommendation of the instructors, and no undergraduate student shall take in one year more than one course in the third section. When an announced course has not been applied for by at least three students, candidates for a degree, the instructor may withdraw the course. First-section courses are numbered 1 to 19, inclusive; second-section courses 20 to 49, inclusive; third-section courses, 50 and upwards. The number of hours, unless otherwise specified, indicate hours per week throughout the year. The unit of credit is one hour of recitation or lecture work per week for one academic year; laboratory hours in Chemistry count one-third unit each, in other subjects one-half unit each. Laboratories and drawing-rooms will be open from 9.15 a.m. till 10 p.m., with competent assistants in charge to direct students. No student is admitted to a course unless he fulfills all the preliminary requirements for the course, or otherwise satisfies the instructor that he is prepared to pursue it. Every student must make his election of courses so as to avoid conflict between the hours appointed for recitations.

Under each course is stated the number of credits for which the course is counted toward satisfying the requirements for the undergraduate degrees of Bachelor of Arts and Bachelor of Science or for the graduate degrees of Master of Arts and Master of Science or for the graduate degrees in engineering.

APPLIED MATHEMATICS

EDWIN VIVIAN DUNSTAN, C.E. ..... Professor
LEONARD SMITH DOTEN, B.S. in C.E. ..... Instructor

Second Section. For Undergraduates and Graduates

20. *Analytical and Applied Mechanics.* (1) Statics: including composition, resolution and equilibrium of forces; center of gravity; moment of inertia. (2) Kinematics and Kinetics: including rectilinear, curvilinear and rotary motion; dynamics of machinery; work and energy; friction; impact. Four hours, first half-year. Two credits. Professor DUNSTAN.

21. *Hydraulics.*—The theoretical principles of hydraulics: including hydrostatics, flow through orifices, over weirs, through pipes and in open channels, and the dynamic pressure of water. Four hours, first half-year. Two credits. Mr. DOTEN.

22. *Mechanics of Materials and Theory of Elasticity.*—Including elastic and ultimate strength and deformation: simple cantilever and continuous beams, columns, torsion; combined stresses; compound columns and beams, including reinforced concrete; resilience; work; fatigue; mathematical theory of elasticity. Four hours, second half-year. Two credits. Professor DUNSTAN.

ARCHAEOLOGY AND HISTORY OF ART

MITCHELL CARROLL, Ph.D.....Professor
EDGAR LEE HEWETT, D.Soc.....Lecturer

Second Section. For Undergraduates and Graduates

20. *History of Art.*—An introductory course in the history of architecture, sculpture and painting. Prehistoric, Greek, Roman and Byzantine, illustrated with photographs, lantern slides and casts. *Wed., Fri.*, at 4.00. Two credits. Professor CARROLL.

Third Section. Primarily for Graduates

50. *Pro-Seminary of Archaeology and History of Art.* 1915–16. *Prehistoric Art and Archaeology.* 1916–17. *Classical Art and Archaeology.* Three credits. Professor CARROLL.

51. *American Archaeology.*—In conjunction with the School of American Archaeology in Santa Fe. Three credits. Professor CARROLL and Dr. HEWETT.

Use is made of the illustrative material in the National Museum, the Library of Congress and the Corcoran Gallery of Art. Students are invited to the open meetings of the Art and Archaeology League of Washington, and the Washington Society of the Archaeological Institute of America.

ARCHITECTURE

ALBERT BURNLEY BIBB.....Professor
ALBERT LEWIS HARRIS, B.S. in Arch.....Professor
BEDFORD BROWN, B.S.....Assistant Professor
DELOZ HAMILTON SMITH, B.S. in Arch.....Instructor

First Section. Primarily for Undergraduates

2. *Freehand Drawing.*—This course consists of drawing, in charcoal, from casts of simple form. Two periods. Two credits. Professor BIBB.

Credit for this course may also be obtained by taking work at the Corcoran Gallery of Art.

3. *Architectural Drawing and Elementary Design.*—This course includes the study of the elements of Architecture including the Five Orders, the use of india ink and water color rendering. At least nine hours per week are to be spent by the student in the drafting room. Three credits.

Criticisms by Mr. SMITH on Monday, Wednesday and Friday evenings.

4. *Projections, Shades, Shadows and Perspective.*—A course in orthographic projections, shades and shadows, followed by a short course in perspective. Two hours. Two credits.

Criticisms by Mr. SMITH on Monday evenings.

5. *Design.*—Problems of an elementary character are given to prepare the student for work in the Class B order of the Society of Beaux-Arts Architects; the rendering of these problems of this Society. At least twelve hours per week are to be spent by the student in the drafting room. Criticisms by Assistant Professor BROWN on Tuesday, Thursday and Friday evenings. Four credits.

6. *Freehand Drawing.*—Advanced course. A continuation of Course 1, and consists of drawing in charcoal and pencil from architectural casts. Two periods. Two credits. Professor BIBB.

Credit for this course may also be obtained by taking work at the Corcoran Gallery of Art.

8. *History of Architecture.*—The course is designed to trace the development of the art in Ancient Egypt, in Greece, and in Rome, and through the early Christian, Byzantine, and Mediaeval periods. *Tu., Th., Sat.*, at 5.00. Three credits. Professor BIBB.

Second Section. For Undergraduates and Graduates

20. *History of Architecture.*—An advanced course offering a critical study of the architecture of the Renaissance in Italy, France and England, and of its effect upon the building arts of our own time. *Tu., Th., Sat.*, at 5.50. Three credits. Professor BIBB.

21. *Building Construction.*—Frame buildings, details of construction, interior finish, three-fourths scale and full size details. One lecture and three hours in drafting room. Two credits. Professor HARRIS.

22. *Sanitation.*—History of sanitation; pollution of water sources; modern plumbing practice; methods of sewage disposal, septic tank, sewage disposal fields, etc. Two lectures a week for one term. One credit. Professor HARRIS.

24. *Pen and Ink Rendering.*—A study of the renderings of the best pen and ink draftsmen with practice in the use of the pen as a means of Architectural expression. One period. One credit.

Hours of criticism selected by conference with Assistant Professor BROWN.

25. *Design.*—Plan problems, sketch problems, and archaeology problems from the Class B Plan programs of the Society of Beaux-Arts Architects. At least fifteen hours a week are to be spent by the student in the drafting room. Five credits. Criticism by Assistant Professor BROWN on Tuesday and Friday evenings.

27. *Advanced Design.*—Plan problems and sketch problems are given from the Class A programs of the Society of Beaux-Arts Architects. The latter part of the year is devoted to a thesis, the subject being selected by the student subject to the approval of the Professor of Design. At least eighteen hours a week are to be spent by the student in the drafting room. Six credits. Criticism by Assistant Professor BROWN on Tuesday and Friday evenings.

28. *History of Sculpture and Painting.*—An advanced course offering a critical study of the lives and work of those artists the significance of whose achievement marks the historical development of art. *Tu., Th.*, at 4.00. Two credits. Professor BIBB.

33. *Water Color.*—Drawing in water color from still life models, from architectural interiors, and from buildings and gardens. Two periods. Two credits. Professor BIBB.

37. *Beaux-Arts Problems.*—In advanced design the student may take the problems under the criticism of Mr. CLARENCE DEAN at the Washington Architectural Club.

39. *Building Construction.*—Masonry foundations, pile foundations, stone work, brick work, fire-proofing, ornamental terra cotta, plastering, specifications. One lecture and three hours in drafting room a week. Two credits. Professor HARRIS.

40. *Water Color.*—Advanced course. A continuation of course 33. Two periods. Two credits. Professor BIBB.

41. *Heating and Ventilating.*—Elementary principles of heating and ventilating; details of installation of hot air, hot water, and steam heating plants. Two lectures for one term. One credit. Professor HARRIS.

43. *Office Practice.*—A course of lectures on office practice, business methods of an Architect and special types of buildings by the teaching staff and practicing Architects of the District of Columbia. One credit.

44. *Advanced Construction.*—A course arranged especially for Architectural students, embracing problems in the determination of beam sizes, girder and column design, grillage beam footings and the design of the simpler forms of trusses. One credit. Professor HARRIS.

ASTRONOMY

ASAPH HALL, JR., Ph.D.....Professor
NATHAN WASHINGTON DOUGHERTY, M.C.E.....Assistant Professor

First Section. Primarily for Undergraduates

1. *Popular Astronomy.*—A course in elementary descriptive astronomy designed to give facts of general interest without the use of higher mathematics. Recitations, lectures and papers on special topics assigned to each student. *Tu., Th.*, at 11.15. Two credits. Assistant Professor DOUGHERTY.

2. *A Course in Practical Astronomy for Civil Engineering Students.*—Special attention is given to the methods of determining latitude, longitude, azimuth and time with the engineer's transit; observations for each being a required part of the course. Two lecture-recitation periods during one term. One credit. Assistant Professor DOUGHERTY.

Third Section. Primarily for Graduates

58. *Celestial Mechanics.*—Theory of central forces; theory of parabolic and elliptic orbits. Lectures, with reading from the works of Gauss, Oppolzer, and Moulton. Three credits. Professor HALL.

ASTRO-PHYSICS

FREDERICK EUGENE FOWLE, JR.....Lecturer

Third Section. Primarily for Graduates

54. A lecture course on the astro-physical instruments employed in modern research. Mr. FOWLE.

BIOLOGICAL SCIENCE

PAUL BARTSCH, Ph.D.....Professor
ALBERT MANN, Ph.D.....Professor
JULIA THECKLA MACMILLAN, A.M.....Instructor
GEORGE TRAVER HARRINGTON, B.S. in Agri., B.S. in Chem.....Instructor
ALEXANDER WETMORE, A.B.....Instructor
WALDO LASALLE SCHMITT, B.S.....Instructor

Botany

First Section. Primarily for Undergraduates

1. *General Botany.*—An introductory course dealing with the fundamental concepts of plant life. Representative members of the different groups of plants will be studied, and lines of evolutionary development will be emphasized. Lecture, *Th.*, at 5.00; laboratory, *Tu.*, and *Sat.*, 5.00–6.40. Three credits. Mr. HARRINGTON.

Third Section. Primarily for Graduates

50. Original investigation in (*a*) Economic Botany, Materia Medica, etc.; (*b*) Parasitism and Monstrosities; (*c*) Researches in Physiology of single groups; (*d*) Comparative Organography. Five credits. Professor MANN.

Zoology

First Section. Primarily for Undergraduates

1. *Systematic Zoology.*—1. Invertebrates. This includes lectures and laboratory work. The lectures cover all the branches of Invertebrates, and correlated with these lectures is the study and dissection of typical specimens in each group. This course is intended to familiarize the student with biological characters, classificatory laws, and the general principles of evolution. Lecture, *Mon.*, at 5.00; laboratory, *Wed., Fri.*, 5.00–6.40. Three credits. Professor BARTSCH and Miss MACMILLAN.

2. *Systematic Zoology.*—II. Vertebrates. This includes lectures and laboratory work. The lectures will cover the various branches of Vertebrates, and correlated with these is the study and dissection of typical specimens of each group. Lecture, *Mon.*, at 5.50; laboratory *Wed., Fri.*, 5.00–6.40. Three credits. Professor BARTSCH, Mr. WETMORE and Miss MACMILLAN.

3. *One Year Premedical Course.*—This is a course especially arranged for students who are taking the one-year premedical course in college. Lecture, *Mon.*, at 5.00 and at a second hour to be arranged. Laboratory, two periods of two hours each. Four credits. Professor BARTSCH and Miss MACMILLAN.

Second Section. For Undergraduates and Graduates

20. *Practical Zoology.*—A lecture course illustrated with lantern slides and demonstrations. In this course only beneficial and injurious animals of all classes will be considered, especial stress being laid upon the problems of preservation and extermination. The course aims to expound the economic side of zoology. Open to all students. One hour. One credit. Not given 1916–17. Professor BARTSCH.

23. *Ornithology.*—A systematic course embracing lectures and laboratory work. The lectures are illustrated with lantern slides, showing the home life of birds. The laboratory work consists in classifying bird skins, of which the University possesses an excellent series. Special attention is directed to the study of the birds of the District of Columbia, and frequent field excursions are made to familiarize the student with the haunts and habits of these forms. Lecture, one hour; laboratory, one two-hour period. Two credits. Professor BARTSCH and Miss MACMILLAN.

Laboratory courses in histology and physiology will be arranged for competent students.

Third Section. Primarily for Graduates

50. Courses may be arranged for competent graduates. Five credits. Professor BARTSCH.

CHEMISTRY

CHARLES EDWARD MUNROE, Ph.D., LL.D.....Professor
FRANK WIGGLESWORTH CLARKE, Sc.D.....Professor
NEVIL MONROE HOPKINS, Ph.D.....Assistant Professor
EDWIN ALLSTON HILL, Ph.D.....Assistant Professor
OTIS DOW SWETT, LL.M., M.S.....Assistant Professor
HIRAM COLVER MCNIEL, Ph.D.....Assistant Professor
EDWARD ROGERS NOYES, M.D.....AssistantProfessor
HENRY ALBERT LEPPER, B.S.....Assistant
ELLA MORGAN AUSTIN ENLOWS, A.B.....Assistant

First Section. Primarily for Undergraduates

1. *General Chemistry.*—A series of illustrated lectures, accompanied by recitations and exercises, on theoretical, inorganic, organic, and technical chemistry. *Tu., Th., Sat.*, at 4.50. Three credits. Professor MUNROE, Assistant Professor SWETT.

2. *Laboratory Practice.*—A laboratory course for the study of the principles of chemistry and the method of conducting chemical experiment. Two three-hour periods. *Tu., Th.*, at 1.30 or at 7. Two credits. Professor MUNROE, Assistant Professor SWETT.

3. *Preparation and Study of the Properties of Chemical Substances.*—A laboratory course. Two three-hour periods. *Tu., Th.*, at 1.30 or at 7. Two credits. Professor MUNROE, Assistant Professor SWETT.

4. *Assaying and Metallurgy of the Precious Metals.*—Carried on by the method used by the Government Assayers, the Laboratory being fitted up on the plan of that of the United States Mint. Twelve hours for three months. Professor MUNROE, Assistant Professor SWETT.

5. *Principles of Analysis.*—Lecture. One hour. One credit. Professor MUNROE.

6. *Metallurgy of Iron and Steel.*—A course of lectures and readings. *Tu.*, at 6.00. One credit. Professor MUNROE.

7. *Qualitative Analysis.*—A brief course intended primarily for students in engineering. Two three-hour periods. *Tu., Th.*, at 1.30 or at 7. Two credits. Professor MUNROE, Assistant Professor SWETT.

Second Section. For Undergraduates and Graduates

20. *Qualitative Analysis.*—A laboratory course in the study of the properties and reactions of chemical substances, and of the means employed for their detection and identification. Three three-hour periods. Three credits. Professor MUNROE, Assistant Professor SWETT.

21. *Quantitative Analysis.*—A laboratory course in the quantitative estimation of the constituents of a specially selected and typical set of chemical substances, which are particularly adapted for teaching the student the aims and methods of quantitative chemical analysis and for imparting facility in manipulation. Four three-hour periods. Four credits. Professor MUNROE, Assistant Professor SWETT.

23. *Organic Chemistry.*—Advanced course. *Wed., Fri.*, at 4.50. Two credits. Professor MUNROE, Assistant Professor SWETT.

24. *Organic Chemistry.*—Advanced course. A continuation of Course 23. *Th., Sat.*, at 6.00. Two credits. Professor MUNROE, Assistant Professor SWETT.

25. *Chemistry of the Carbon Compounds.*—A laboratory course in the preparation and study of the properties of a characteristic series of organic compounds. Four three-hour periods. Four credits. Professor MUNROE, Assistant Professor SWETT, Mr. LEPPER.

26. *Physical Chemistry.*—A lecture course designed to be an introduction to physical chemistry, and to treat of the modern theories of chemistry from the physical standpoint. In this course special attention is given to the ionic theory, electro-chemistry, the law of mass action, and the phase rule. Two hours. Two credits. Assistant Professor MCNEIL.

27. *Stereo-Chemistry.*—This course deals with the arrangements of atoms in space from a theoretical standpoint, while the student is taught how to form models by which to illustrate their arrangements. Two hours. Two credits. Assistant Professor HILL.

28. *Biochemistry.*—A laboratory course in the chemical examination of some of the chief foodstuffs, the tissues and fluids of the body, and the products of certain organisms; also the isolation of the digestive enzymes and a study of their action *in vitro*. Three three-hour periods. Three credits. Assistant Professor NOYES.

Third Section. Primarily for Graduates

50. *Explosive Substances.*—Five credits. Professor MUNROE.

51. *Analytical Methods.*—Five credits. Professor MUNROE.

53. *Development of the Theory of the Constitution of the Natural Silicates.*—Five credits. Professor CLARKE.

55. *Special Researches in Electro-Chemistry.*—Five credits. Assistant Professor HOPKINS.

Students in Chemistry are invited to attend the meetings of the Chemical Society of Washington which are held on the second Thursday of each month from October to May, in the Assembly Hall of the Cosmos Club, at 8 p.m., and also the meetings of the Chemical Society of the George Washington University which is a most active and efficient student organization.

CIVIL ENGINEERING

EDWIN VIVIAN DUNSTAN, C.E.....Professor
OSCAR ALEXANDER MECHLIN, C.E.....Professor
NATHAN WASHINGTON DOUGHERTY, M.C.E.....Assistant Professor
LEONARD SMITH DOTEN, B.S. in C.E.....Instructor

First Section. Primarily for Undergraduates

1. *Surveying and Mapping.*—This course includes recitations, field and drawing room work. The recitations will cover the theory, adjustment and use of instruments; land, city, topographic, mine, hydrographic and geodetic surveying. The field work includes the adjustment of instruments, the use of the level, transit and compass. Data is taken for a map covering an area of about one-quarter square mile. The computations cover problems in the closing of traverses, computing areas, reduction and plotting of field notes. Two recitations a week; field and drawing room work equivalent to one three-hour period a week throughout the year. Three credits. Assistant Professor DOUGHERTY.

2. *Railroad Engineering.*—This course includes recitations, field and drawing room work. The recitations cover railroad curves and earthwork, methods of location and construction of railway lines. The field work consists in a preliminary and location survey of about one mile of railway; the laying out of circular and transition curves, etc. The computations and mapping consist of making an estimate of quantities and cost of a piece of line, making maps, profiles and a mass diagram. Two lecture-recitations and one three-hour field or drawing period a week throughout the year. Three credits. Assistant Professor DOUGHERTY.

3. *Highways and Pavements.*—This course comprises the study of highway location, construction and maintenance; the various methods of surfacing; the materials used and the standard tests of these materials. A study is also made of the methods of street paving, street grades, etc. Two hours a week during the second half-year. One credit. Assistant Professor DOUGHERTY.

4. *Materials of Construction.*—A course in the study of the chemical and physical properties of: stone, brick, lime, wood, iron, steel and a few of the minor alloys. Stress is laid on the manufacture and the properties of the materials that affect their use in engineering construction. The class room work is supplemented by tests in the cement laboratory and on the 200,000 pound Olsen testing machine in the testing laboratory. Two lecture-recitations and one laboratory period a week during the first half-year. One credit. Assistant Professor DOUGHERTY.

5. *Surveying Instruments.*—A two-months' course for Mechanical and Electrical Engineering students, covering the use of the compass, transit, and level. Lectures and field exercises, two hours. One-half credit. Assistant Professor DOUGHERTY.

6. *Foundations.*—A two-months' course for Mechanical and Electrical Engineering students, covering the general principles of foundation construction and the materials used. Two hours. One-half credit. Assistant Professor DOUGHERTY.

Second Section. For Undergraduates and Graduates

20. *Concrete and Masonry Construction.*—A study in the principles of concrete construction, the theory of beams and columns, unit stresses used in design, methods of reinforcing and the design of forms. In masonry a study is made of brick and stone masonry, theory of foundations, piles and pile driving, caissons, coffer-dams, etc. The design of bridge piers, abutments, retaining walls, culverts and other similar structures. Two lecture-recitations and one design period a week throughout the year. Three credits. Assistant Professor DOUGHERTY.

21. *Hydraulic Engineering.*—The design and construction of water-power plants and irrigation works. Flow of rivers; rainfall and runoff; methods of development; hydraulic motors; power transmission. Irrigation plans; distributing system; water rights and irrigation law. Four lectures and one design period, second term. Two and one-half credits. Mr. DOTEN.

22. *Structures.*—A course covering the determination of stresses in framed structures by graphical and by analytical methods. The first term is devoted to beams and roof trusses; the second to bridge trusses under uniform and wheel loads. Three lectures and two design periods. Five credits. Professor DUNSTAN.

23. *Structures.*—Design of structures in timber and steel. About two months is devoted to the design of timber trestles, roof trusses and slow-burning building construction; the remainder of the year to steel design of mill and office buildings; girder, riveted and pin-connected bridges. Three lectures and two design periods. Five credits. Professor DUNSTAN.

24. *Sanitary Engineering.*—Water supply: the collection, storage and distribution of water; the design and construction of dams, reservoirs and storage tanks; construction and maintenance of water distributing systems; pumping machinery; quality of water; interpretation of water analyses; sedimentation and aëration of water; sand filtration; mechanical filtration; chemical treatment of water; the relation of water supply to infectious diseases.

Sewerage: house plumbing, heating and ventilation; sewerage and drainage systems; methods of disposal of sewage and trade wastes; treatment of sewage; garbage and refuse disposal. Three lectures and one design period. Four credits. Mr. DOTEN.

26. *Testing Materials.*—In this course tests will be made on cement, concrete, brick, timber and the metals, following as near as possible the standard methods prescribed for each material. Special stress will be placed on the methods of taking data in the laboratory and the writing of reports. One laboratory period per week during the second term. One credit. Assistant Professor DOUGHERTY.

Third Section. Primarily for Graduates

50. *Reinforced Concrete Structures.*—Theory and design: buildings, bridges, retaining walls, dams, tanks, etc. One lecture and two design periods. Three credits. Professor DUNSTAN.

51. *Advanced Steel Structures.*—Theory and design of suspension, cantilever, movable and arch bridges. One lecture and two design periods. Three credits. Professor DUNSTAN.

52. *Architectural Engineering.*—Mechanical equipment of buildings; calculations and design of the plumbing, water supply, heating, ventilating, and electrical equipment. Two lectures and one design period. Three credits. Professor MECHLIN.

53. *Railroad Engineering.*—An advanced course in railroad location, construction, and maintenance of way. It must be preceded by Civil Engineering course 2. Three credits. Assistant Professor DOUGHERTY.

54. *Water and Sewage Purification.* An advanced course dealing with the practical application of the principles and methods involved in the purification of water supplies and in the disposal and treatment of sewage. One lecture and two design periods. Three credits. Mr. DOTEN

CLASSICAL LANGUAGES AND LITERATURES

CHARLES SIDNEY SMITH, Ph.D.....Professor

Greek

First Section. Primarily for Undergraduates

A. *Elementary Course.*—For students who have not taken Greek before matriculating. It aims to cover as much as possible of the entrance requirement in Greek, with the exception of Homer. Not given in 1916–17.

B. *Homer: Iliad I-IV.*—For students who have taken Course A and desire to prepare themselves to enter Course 1. *Tu., Th.*, at 10.15. Two credits.

1. Herodotus (selections); Lysias (selected orations); Euripides (Alcestis); Greek prose composition. *Mon., Wed., Fri.*, at 2.45. Three credits.

2. Xenophon (Memorabilia); Thucydides (Book VII); Sophocles (Antigone). *Mon., Wed., Fri.*, at 11.15. Three credits.

Second Section. For Undergraduates and Graduates

20. Plato (selections, including the Apology and Crito); Aristophanes (Clouds or Frogs). Not given in 1916–17.

21. Demosthenes (selected orations); Lucian (selected dialogues); Homer (selections). *Tu., Th.*, at 1.45. Two credits.

Latin

First Section. Primarily for Undergraduates

1. Livy (Books I and XXI); Cicero (De Senectute); Horace (Odes and Epodes); Latin prose composition. Open to students who have satisfied the admission requirements in elementary and advanced Latin. *Mon., Wed., Fri.*, at 3.45. Three credits.

2. Cicero and Pliny (selected Letters); Horace (Satires and Epistles); Martial (selections). *Mon., Wed., Fri.*, at 1.45. Three credits.

Second Section. For Undergraduates and Graduates

20. Tacitus (selections); Terence (Phormio); Plautus (Captivi). *Tu., Th.*, at 11.15. Two credits.

21. Quintilian, Book X, and Horace, Ars Poetica; Catullus, Tibullus, and Propertius. Not given in 1916–17.

22. *Advanced Latin Composition and Reading at Sight.*—Practice in Latin expression and style. *Th.*, at 2.45. One credit.

Third Section. Primarily for Graduates

The work in this Section is designed to afford discipline in the methods of philological criticism, with special reference to the interpretation of classical authors, and will include opportunities for original research on the part of competent students. In order to make the work as helpful as possible for those who expect to become teachers, the center of study each year will be one of the authors usually taught in the secondary schools. With the approval of the instructor, properly qualified Seniors may be admitted to these courses. The authors selected are as follows:

50. *Vergil, and Roman Epic Poetry.*—Two hours. Three credits.

51. *Caesar, and the Roman Historians.*—Not given in 1916–17.

52. *Cicero, and Roman Oratory.*—Not given in 1916–17.

Classical Literature

First Section. Primarily for Undergraduates

1. *General Survey of Classical Literature (in English).*—This course which is designed to give an outline of the development of the different departments of literature in ancient Greece and Rome, will include selected readings, in translation, from the most important authors. Being primarily intended for students who are not taking Greek or Latin, it does not require a knowledge of those languages, and is open to all undergraduates as an elective. *Tu., Th.*, at 3.45. Two credits.

ECONOMICS AND SOCIOLOGY

ROBERT RUSS KERN, A.B. ..... Professor
L. RUSSELL ALDEN, A.M., L.L.B. ..... Assistant Professor
FRANK ROY RUTTER, Ph.D. ..... Lecturer
FRANK ANDREWS, A.B. ..... Lecturer

First Section. Primarily for Undergraduates

1. *General Economics.*—An outline course in the principles of political economy, devoted mainly to the study of production and exchange under present-day conditions, followed by a study of the problems of rent, interest, wages, and profits, and including an examination of competition, private property, and economic programs. *Mon., Wed., Fri.*, at 11.15. Three credits. Professor KERN.

2. Parallel with course 1. *Mon., Wed., Fri.*, at 5.50. Three credits. Professor KERN.

Second Section. For Undergraduates and Graduates

22. *General Sociology.*—An outline course in the principles of sociology devoted mainly to an examination of the organization of society and its ideals, with a study of the social systems, their functions, efficiencies and programs for their development. First half-year. *Tu., Th.*, at 5.00. One credit. Professor KERN.

23. *Modern Social Problems.*—A further analysis of modern social conditions with special studies of current questions in sociology. Prerequisite, the course in general sociology. Two hours, second half-year *Tu., Th.*, at 5.00. One credit. Professor KERN.

24. *The History of Economic Thought.*—A review of the development of economics as a science from the earliest times to the present. Lectures and library readings. Two hours, first half-year. Given in alternate years. Not given in 1916–17. Assistant Professor KERN.

26. *Public Finance.*—A course in the development of budgetary and fiscal methods and principles. The history and tendencies of public expenditure under the Federal and State governments. The theory of taxation; administration of public domains, and industries; public debts. Second half-year. *Tu., Th.*, at 5.00. One credit. Professor KERN.

27. *Money and Banking.*—The history and theory of money; the production of the precious metals; the theory of prices and measurement of price fluctuations; monetary systems; the relation of the Treasury system to our money supply; the theory of credit and banking; the national bank system of the United States and the banking system of foreign nations. First half-year. *Tu., Th.*, at 5.00. One credit. Professor KERN.

28. *Economic Problems.*—An advanced course devoted to a more thorough study of the problems developed in the general course in economics. Research and preparation of papers to be presented to the class for discussion and criticism. Credit for course 1, General Economics, is requisite for admission to this course. Not given in 1916–17. Professor KERN.

33. *Commercial and Maritime Law.*—An outline of the principles of the law relating to commercial transactions generally, including those peculiar to the sea, with more especial reference to the subjects of contracts,

sales, bailments, agency, partnership, negotiable instruments, and common carriers. *Tu., Th.*, at 5.50. Two credits. Professor ALDEN.

36. *Commercial Geography and Economic Resources.*—During the first term, a general survey is made of the products, industries, and commerce of the United States and of the principal foreign countries. This survey is supplemented during the second term by a detailed study of agriculture, mining, and manufactures throughout the world, but with special reference to the United States; separate treatment of each important crop and branch of manufactures, with inquiry into the causes of the localization of industry. *Mon., Fri.*, at 5.50. Two credits. Dr. RUTTER.

37. *Transportation.*—Development and control of land and water transportation in the United States and Europe. Railroad construction; competition; combination; regulation; rates; discrimination; government ownership. Inland waterways. Ocean carriage; subsidies; combination; rebates. Suez and Panama Canals. *Mon., Fri.*, at 5.00, second half-year. One credit. Dr. RUTTER.

38. *International Commercial Policy.*—Comparative study of the tariff systems of the principal foreign countries. Interrelation of tariffs; commercial treaties; most-favored-nation treatment; reciprocity and colonial preference; discrimination and countervailing duties; tariff wars. Commercial relations of the United States with foreign countries; need of foreign markets for increased output of manufactures. *Mon., Fri.*, at 5.00, first half-year. One credit. Dr. RUTTER.

40. *Economic History of the United States.*—Development of agriculture from staple crops to diversified farming. Settlement of public lands; immigration. Introduction of manufactures; development since the Civil War; characteristics. Commerce; agricultural products giving way to manufactured articles. Tariff history and policy. *Mon., Fri.*, at 5.00, first half-year. One credit. Not given in 1916–17. Dr. RUTTER.

41. *Statistics.*—Introduction to main sources of statistical information; margin of error; practical tests in the use of statistics of population, agriculture, manufactures, commerce, transportation, finance, wages, and prices. Methods of collection in the United States and Europe. *Mon., Fri.*, at 5.00, second half-year. One credit. Not given in 1916–17. Dr. RUTTER.

43. *Combinations, Trusts.*—A discussion of the conditions which have favored the growth of large business combinations, the nature of their organization, their influence upon prices and productive efficiency, and the regulation and supervision of them. First half-year. *Mon., Fri.*, at 9.15. One credit. Professor KERN.

44. *Labor Problems.*—A brief sketch of the labor movement in the United States and of the aims and methods of trade unions, followed by a discussion of such problems as: child labor; dangerous occupations; workingmen's insurance against sickness, old age, accidents, and unemployment; strikes and industrial conflicts; conciliation and arbitration; collective bargaining. Second half-year. *Mon., Fri.*, at 9.15. One credit. Professor KERN.

Third Section. Primarily for Graduates

51. *Seminar in Sociology.*—A research course for the detailed investigation of special sociological problems, suitable for those who are engaged in original investigation or in the preparation of a thesis. Hours to be arranged. Three credits. Professor KERN.

EDUCATION

WILLIAM CARL RUEDIGER, Ph.D.....Professor
WILLARD STANTON SMALL, Ph.D.....Lecturer
ARTHUR DEERIN CALL, A.M.....Lecturer
MARIETTA STOCKARD, A.B.....Lecturer
HARRIET UNDERWOOD, A.B.....Assistant

Second Section. For Undergraduates and Graduates

20a. *Principles of Teaching.*—A comprehensive course in the principles underlying the teaching process in its intellectual, emotional and motor phases. Special attention is given to making teaching concrete and meaningful. First half-year. *Mon., Wed., Fri.*, at 11.15. One and one-half credits. Professor RUEDIGER.

20b. *Principles of Education.*—A comprehensive course in the bases, aims, values and essential content of education as revealed by biological, psychological, sociological and ethical principles. Second half-year. *Mon., Wed., Fri.*, at 11.15. One and one-half credits. Professor RUEDIGER.

21a. *Principles of Teaching.*—A brief course in the psychological and logical principles underlying the teaching process. First half-year. *Tu., Th.*, at 4.00. One credit. Professor RUEDIGER.

21b. *Principles of Education.*—A brief course in the bases, aims, values and essential content of education as revealed by biological, psychological, sociological and ethical principles. Second half-year. *Tu., Th.*, at 4.00. One credit. Professor RUEDIGER.

(Courses 20 and 21 should be preceded or accompanied by general psychology. Course 21 is designed especially for teachers in service.)

22. *History of Education.*—A general course in the historical development of educational theory and practice. *Sat.*, 9.15–11.15. Two credits. Professor RUEDIGER.

23. *Child Study.*—Not given in 1916–17. Dr. SMALL.

24. *School Sanitation and Hygiene.*—A survey of the relations of education and health, including: The function of the school in promoting health; physical examination of children; medical inspection; physical education; diseases and defects incident to school life; the organization of instruction as related to fatigue; defective children; schoolhouse construction and sanitation. Lectures, reference work, and reports. *Th.*, at 5.00. One credit. (See course 27.) Dr. SMALL.

25. *Secondary Education.*—After sketching the meaning and significance of secondary education as revealed by educational theory, by the secondary schools of Germany, France, and England, and by the history of secondary education in America, the course will consider in some detail the educational values, essential content, and methods of teaching the various high school branches. The problems of essential minima, of the connection of the studies with life, and of the development of initiative in the student will be emphasized. *Tu., Th.*, at 4.00. Two credits. Dr. SMALL.

27. *School Administration.*—If a majority of the applicants desire it, this course will be given in place of course 24. One credit. Dr. SMALL.

28. *Experimental Education.*—A laboratory course on processes of learning, transfer of practice, association, memory, etc. Special emphasis will be laid upon practical work with the Binet and other mental tests. One credit. Not given in 1916–17. See Philosophy 25. Professor RUEDIGER and Miss UNDERWOOD.

29. *Educational Story Telling.*—Study of type stories, adaptation of stories, practical story telling. It is the purpose of the course to develop a basis for the selection and presentation of suitable children's literature, taking into consideration the various stages of the child's development.

Lectures, required reading and reports. Not given in 1916–17. Two credits. Miss STOCKARD.

30. *Story Telling and Children's Literature.*—Study of Epics—Iliad, Odyssey, and Kalevalla. Retelling, possible dramatization.

Part of the course will be given to a discussion of reading and reading books with a view to supplementing with stories and units of literature. It will be the purpose to work toward a solution of the problem of developing in the child a higher appreciation of the best in literature and a real love of books through his school reading. The course will extend and supplement course 29 but will be open to all upper class students. *Mon., Wed.*, at 4.00. Miss STOCKARD.

(Courses 29 and 30 are given in alternate years.)

31. *Elements of Teaching.*—This course will deal briefly with the general principles involved in self culture, our moral ideal, the state and society, the problem of study, the teaching process, lesson assignment, the recitation, and the art of questioning. The principles developed will be applied to the teaching of reading, English, and American history. The course satisfies the requirement in the Principles of Teaching. Not given in 1916–17. One credit. Mr. CALL.

32. *Adolescence.*—Not given in 1916-17. Dr. SMALL.

33. *Ethical Principles in Education.*—The aim of this course is to promote a deeper professional spirit by stimulating the professional cast of mind. Some of the topics to be studied are: the meaning of ethics; maxims for an ethical code; ethical elements in self-culture; various ethical interpretations of the moral ideal; ethical elements in the advancement of truth; ethics of veracity; the ethics of example; the ethics

of charity; ethics and the solution of crime; the ethical value of the state; the ethical interpretation of society; the rise of moral enthusiasm; ethical values in public education. *Tu.*, at 5.00. One credit. Mr. CALL.

(Courses 31 and 33 are given in alternate years.)

34. *Observation.*—Observation of experienced teachers, under guidance, in the elementary and secondary schools of the city. The course should normally be taken in the junior year. One credit. Professor RUEDIGER.

35. *Practice Teaching.*—Opportunity for practice teaching under supervision and criticism is provided in the University Demonstration School. The course should normally be taken in the senior year. One credit. Professor RUEDIGER.

(The students taking courses 34 and 35 will meet together once a week for conference and discussion.)

Third Section. Primarily for Graduates

50. *Seminar in Education.*—The theme for 1916–17 will consist of a critical study of recent publications in educational psychology. Both book and periodical literature will be drawn upon. Special attention will be given to the writings of Madame Montessori, her expounders and critics. Open to qualified undergraduates. *Tu., Th.* at 5.00. Three credits. Professor RUEDIGER.

ELECTRICAL ENGINEERING

CHARLES WARD MORTIMER, M.E.....Assistant Professor
MARK RITTENHOUSE WOODWARD, E.E.....Assistant Professor
HAYNER HASKELL GORDON, E.E., Ph.D.....Instructor

First Section. Primarily for Undergraduates

1. *Elementary Mathematical Theory of Electricity and Magnetism.*—Elementary electricity and magnetism is studied with special attention to the needs of engineering students. The phenomena accompanying static electricity are noted. Problems illustrating the theory and having practical application are required to be solved. Two hours. Two credits. Assistant Professor MORTIMER.

2. *Elements of Electricity; Direct Current Motors and Generators; Design Work.*—Elements of electricity are studied during the first term and especial emphasis is laid upon the principles underlying the flow of currents. During the second term a study is made of direct current generators and motors, covering the laws of the magnetic circuit as applied to the dynamo. The course includes the design of electrical machinery and apparatus. An introductory study of alternating currents is also begun. Numerous problems are assigned throughout the course. Three hours. Three credits. Assistant Professor MORTIMER.

4. *Electrical Measurements.*—A laboratory course for Juniors. Selected experiments. Foster's Hand-book and special laboratory notes are used for reference. Two three-hour periods, first half-year. One credit. Assistant Professor MORTIMER.

5. *Electrical Laboratory.*—Experiments and tests involving the operation of direct-current dynamos and motors, including tests of motors in service, operating elevators, street cars, and machinery of various kinds. Text-book: Sever and Townsend's "Laboratory and Factory Tests in Electrical Engineering." Two three-hour periods, second half-year. One credit. Assistant Professor MORTIMER.

6. *Industrial Electricity.*—A practical course intended for Juniors in Civil Engineering, embracing the selection and operation of electrical machinery, electrical railways and other applications of electric motors. Two hours, first half-year. One credit. Assistant Professor WOODWARD.

7. *Electrical Engineering.*—A course in theoretical and applied electricity intended for Seniors in Mechanical Engineering. It embraces the selection and operation of electrical machinery, the location, construction, and operation of power plants, electric railways and transmission lines, the use of electric motors for driving machinery, and the working of storage batteries, elevators, hoists, and cranes. Three hours. Three credits. Assistant Professor WOODWARD.

8. *Electrical Design.*—A course for Seniors in Electrical Engineering, embracing calculation and design of electrical machinery and accessories, including switchboards, rheostats, instruments, and arrangement of same. One credit.

Second Section. For Undergraduates and Graduates

21. *Alternating Current Theory and Machinery.*—A course for Seniors in Electrical Engineering, covering the principles of single as well as polyphase currents, including study of machines, circuits, transformers, etc. Four hours. Four credits. Assistant Professor MORTIMER.

22. *Electrical Distribution.*—A course for Seniors in Electrical Engineering, covering the whole field of distribution of electricity for light and power. Text-book: Ferguson's Elements of Electrical Transmission. One hour. One credit. Assistant Professor MORTIMER.

23. *Electrical Applications.*—A course for Seniors in Electrical Engineering, covering the more important applications of electricity, such as motive power, including elevators, hoists and machine drive, telephony, telegraphy, electro-metallurgy, etc. One hour. One credit. Assistant Professor WOODWARD.

24. *Advanced Laboratory Work for Seniors in the Electrical Engineering Course.*—Covers test and experimental work with direct and alternating currents, tests of machines, circuits, transformers, circuits containing inductance and capacity, measurement of power in alternating current circuits, plotting of curves, etc. Text-book: Sever and Townsend's

Laboratory and Factory Tests in Electrical Engineering, with Foster's Electrical Engineer's Hand-book for general reference. Two three-hour periods. Two credits. Assistant Professor MORTIMER.

25. *Inspection of Plants and Industrial Works.*—In the vicinity of Washington and Baltimore are a number of modern electric lighting and street railway plants, telephone exchanges, telegraph operating rooms, Government laboratories devoted to special work, etc., which afford students of Electrical Engineering an opportunity to familiarize themselves with nearly all types of apparatus in use. The visits are followed by class discussion based on written description submitted by the students.

26. *Electric Lighting and Illumination.*—A course for Seniors in Electrical Engineering covering the subject of electric lighting and illumination, including detailed study of different types of lamps, shades, arrangement of light sources, effect of walls, etc. Two hours. Two credits. Assistant Professor WOODWARD.

27. *Electric Railways.*—A course for Seniors in Electrical Engineering covering the theory and practice of modern, direct and alternating current railways. Two hours, second half-year. One credit. Assistant Professor MORTIMER.

28. *High Frequency Current.*—A lecture course covering the theory of high frequency and oscillatory currents and their application to wireless telegraphy and telephony. The condenser discharge, the theory of resonance in coupled circuits, and electromagnetic waves will be treated. The design of wireless telegraph and telephone apparatus will also be discussed. The class will meet in the laboratory from time to time to familiarize themselves with the use of wireless apparatus. One period. One credit. Dr. GORDON.

Juniors and Seniors in Electrical Engineering are expected to attend the monthly meetings of the Washington Branch of the American Institute of Electrical Engineers.

Third Section. Primarily for Graduates

53. *Advanced Course in Polyphase Currents.*—Three credits. Assistant Professor MORTIMER.

54. *Advanced Laboratory Work, Alternating (including Polyphase) Current Apparatus.*—Three credits. Assistant Professor MORTIMER.

ENGLISH

WILLIAM ALLEN WILBUR, A.M.....Professor
DE WITT CLINTON CROISSANT, Ph.D. From September 1, 1916
Professor
RICHARD COBB, A.B., To September 1, 1916.....Assistant Professor
RALPH WEBSTER BENTON, A.B.....Assistant

First Section. Primarily for Undergraduates

1. *English Rhetoric.*—A study of the principles of self expression through language with practice in composition. *Tu., Th., Sat.*, at 10.15. Three credits. Professor WILBUR.

2. *English Rhetoric.*—Parallel with Course 1. *Mon., Wed., Fri.*, at 5.00. Three credits. Professor WILBUR.

NOTE.—Credit for Course 1 or 2 is requisite for admission to any other course in English except 5 or 7.

5. *General Survey of English and American Literature.—Tu., Th.*, at 5.00. Two credits. Not given in 1916–17.

7. *English Literature.*—Lectures on the history of English literature with collateral readings. *Tu., Th., Sat.*, at 11.15 Three credits. Professor CROISSANT.

Second Section. For Undergraduates and Graduates

20. *English Composition.—Tu., Th.*, at 11.15. Two credits. Not given in 1916–17.

21. *The English Novel.—Tu., Th.*, at 2.45. Two credits. Not given in 1916–17.

22. *Shakespeare, 1915–16.*—The Tragedies.

23. *Shakespeare, 1916–17.*—The Comedies. *Mon., Wed., Fri.*, at 9.15. Three credits. Professor WILBUR.

(The Temple edition of Shakespeare is recommended.)

27. *Humanistic Studies, 1916–1917.*—Selected masterpieces of poetry and drama. *Tu., Th., Sat.*, at 9.15. Three credits. Professor CROISSANT.

28. *Humanistic Studies, 1916–1917.*—Selected prose of the nineteenth century. Three credits. *Mon., Wed., Fri.*, at 5.50. Professor CROISSANT.

29. *The English Drama, 1916–1917.*—The modern drama from 1870 to the present including Continental, British, and American writers. *1817–1918.*—The English Drama from the beginning to 1870. *Mon., Wed., Fri.*, at 4.00. Three credits. Professor CROISSANT.

31. *Journalism.*—The fundamentals of newspaper writing. *Mon., Wed., Fri.*, at 1.45. Three credits. Professor CROISSANT.

Third Section. Primarily for Graduates

50. *The Philosophy of Tennyson, 1916–17.*—Idylls of the King; In Memoriam. *Tu., Th.*, at 5.00. Three credits. Professor WILBUR.

52. *The Short Story, 1915–1916.*

53. *Elizabethan Literature, 1915–1916.*

54. *Edmund Spenser, 1915–1916.*

FRENCH

See Romance Languages.

GEOLOGY AND MINERALOGY

GEORGE PERKINS MERRILL, Ph.D.....Professor
RAY SMITH BASSLER, Ph.D.....Professor
CHARLES ELMER RESSER, A.M.....Instructor

First Section. Primarily for Undergraduates

1. *Mineralogy.*—Crystallographic, descriptive, and determinative mineralogy. This course is designed with especial reference to minerals as rock constituents or segregated as ore deposits. It includes, therefore, a discussion of not merely the crystallographic and theoretical, but the practical side of the subjects as well. Whenever possible, it should be considered as introductory to the courses in either systematic or economic geology. *Mon., Fri.*, at 5.00. Two credits. Professor BASSLER and Mr. RESSER.

2. *Geology.*—Systematic geology; dynamical, structural and stratigraphical. The course is designed to form a part of a general-culture course, or a preliminary course for those intending to make a specialty of geology. It includes lectures, recitations, laboratory and field work so far as hours will permit. Paleontology is treated as a branch of geology, having especial reference to stratigraphy and correlation. Text-books: Blackwelder and Barrows' Elements of Geology; Merrill's Rocks, Rock Weathering, and Soils. *Mon., Fri.*, at 5.50. Two credits. Professor BASSLER and Mr. RESSER.

3. *Principles of Geography.*—This course considers the phenomena of the earth as a whole, the interrelations of these phenomena and their influence upon human affairs. It includes a study of the general geographical principles, including those of physiography and climate, and their application. *Wed.*, at 5.00. One credit. Mr. RESSER.

Second Section. For Undergraduates and Graduates

20. *Economic Geology.*—[Geology 1 and 2 and Chemistry 1 are prerequisite for this course.] The course covers the subjects comprised under: (1) Mineral veins and metalliferous deposits, their mode of occurrence, origin, and classification; (2) the ores of iron, copper, lead, zinc, tin, silver, gold, mercury, antimony, etc.; and (3) the non-metallic minerals as the coals and hydrocarbon compounds; salts and materials used in chemical manufactures; abrasive, refractory, and fictile materials, pigments, gems, ornamental stones, building stones, limes, cements, and mineral waters. Text-books: Lindgren's Mineral Deposits. Merrill's Stones for Building and Decoration and The Non-Metallic Minerals. *Mon., Fri.*, at 5.00. Given in alternate years. Not given in 1916–17. Two credits. Professor BASSLER and Mr. RESSER.

21. *Engineering Geology.*—This course is intended primarily for civil engineers and others interested in applied geology. The work covers the general principles of geology with special emphasis upon those re-

lating to engineering problems. The structure of rocks relative to building operations, the controlling factors of water supply and water purification and similar problems are discussed in detail. Text-book, Engineering Geology by Ries and Watson. *Mon., Fri.*, at 4.00. Two credits. Mr. RESSER.

22. *Paleontology.*—A course in lecture and laboratory work on the biological and geological relations of the more important types of animals and plants, with especial reference to their value in stratigraphic geology. Three credits. Professor BASSLER.

Third Section. Primarily for Graduates

50. *Advanced Geology and Paleontology.*—The student in this course may devote his time largely, if necessary, to perfecting himself in methods; to general work in the laboratory and in the field; to the examination of geological materials, and to familiarizing himself with the literature of the subject. Two credits. Professor BASSLER.

51. *Advanced Economic Geology.*—This course is open only to graduate students, and is arranged to suit the special needs of the students admitted. Three credits. Professor MERRILL.

GERMANIC LANGUAGES AND LITERATURE

HERMANN SCHOENFELD, Ph.D., LL.D.....Professor
ALFRED FRANCIS WILLIAM SCHMIDT, A.M.....Professor

First Section. Primarily for Undergraduates

1. *Elementary.*—The essentials of German grammar; translation of prose and poetry; beginning conversation; composition and dictation. This course is open to beginners, and the work done is equivalent to that of a two years' course in high schools and academies of good standing. *Tu., Th., Sat.*, at 11.15. Three credits. Professor SCHOENFELD.

2. Parallel with Course 1. *Tu., Th., Sat.*, at 5.00. Three credits. Professor SCHMIDT.

3. Selected texts from the best contemporary authors will be read and one or more of the German classics carefully studied. The work in grammar and composition done in elementary German will be continued, with special emphasis on syntax, word-formation, and the relationship of German and English; conversation continued. This course is equivalent to the advanced German of the admission requirements, and it is open only to students who have passed Course 1 or 2, or have satisfied the admission requirement in elementary German. *Mon., Wed., Fri.*, at 11.15. Three credits. Professor SCHOENFELD.

4. *Parallel with Course 3.*—Contemporary German is read during the first half-year and classical during the second half-year. *Mon., Wed., Fri.*, at 5.50. Three credits. Professor SCHMIDT.

5. Advanced course in German syntax; principal difficulties of the language: idioms; synonyms; translations of English prose into German; essays; selected advanced prose; classical reading and literature; German history. Open to students who have passed Course 3 or have satisfied the admission requirement in advanced German. *Mon., Wed., Fri.*, at 1.45. Three credits. Professor SCHOENFELD.

6. *Scientific and Technical German.*—Designed primarily for students in the scientific and engineering courses. This course may be taken by students who have passed Course 1 or 2, or who have satisfied the admission requirement in elementary German. *Tu., Th., Sat.*, at 5.50. Three credits. Professor SCHMIDT.

8. Parallel with Course 5, with special reference to advanced students both in the historico-political and the scientific departments. *Tu., Th., Sat.*, at 5.00. Three credits. Professor SCHOENFELD.

Second Section. For Undergraduates and Graduates

20. *Outline of the History of German Literature and Civilization from the Teutonic Origins to the Renaissance and Reformation*, with specia reference to the emerging of the Germanic, Romance, and Slavic races.—Lectures, extensive readings of the classics of the first period of bloom; advanced practice in writings, essays. *Mon. Wed., Fri.*, at 10.15. Three credits. Professor SCHOENFELD.

21. *German Literature of the Second Classic Period at its Zenith.*—Goethe's and Winckelmann's influence on German art; with special reference to the modern German drama; classical ballad and lyric poetry; renascence of the German volkslied in the eighteenth and nineteenth centuries. *Tu., Th., Sat.*, at 10.15. Three credits. Not given in 1916-17. Professor SCHOENFELD.

22. *The Currents of German Literature from the beginning of the Nineteenth Century until 1870.*—Romanticism, its social and political aspects; Modern German Drama, with special emphasis on Kleist, Grillparzer, Hebbel; Lyrics and Ballads: Uhland and Heine. *Tu., Th., Sat.*, at 10.15. Three credits. Professor SCHOENFELD.

Third Section. Primarily for Graduates

50. *Seminar in the History of Middle High German Literature*, with special reference to the Epic and Lyrical Poetry in the Twelfth and Thirteenth Centuries. Introduction to scientific methods of historical and literary research in the Nibelungenlied and the Gudrunsaga. Three credits. Professor SCHOENFELD.

51. *Gothic.*—Introduction to comparative Indo-European Grammar. Three credits. Professor SCHMIDT.

52. *Old High German.*—The development of the German language. Three credits. Professor SCHMIDT.

Only one of the foregoing two courses (51, 52) is given in any one year.

For notice of the Richard Heinzel Germanic Library, see page 40.

GRAPHICS

NATHAN WASHINGTON DOUGHERTY, M.C.E.....Assistant Professor
WILLIAM DARRACH HALSEY.....Instructor

First Section. Primarily for Undergraduates

1. *Mechanical and Freehand Drawing.*—A general course embracing the care and use of instruments; orthographic and isometric projections; sections and intersections; curve plotting; sketching of simple machine details; freehand lettering; principles of working drawings. Two three-hour periods. *Mon., Wed.*, at 1.45 or at 7.30 p.m. Two credits. Assistant Professor DOUGHERTY and Mr. HALSEY.

2. *Advanced Mechanical Drawing.*—A course in working drawings especially designed for Electrical and Mechanical Engineering students. Drawing-room rules and practice; conventional forms and standards; arrangement of views and sections; freehand shop-sketches; detailing from sketches, models and general drawing; proportioning by empirical formulas. Two three-hour periods. *Mon., Wed.*, at 1.45 or at 7.30 p.m. Two credits. Assistant Professor DOUGHERTY and Mr. HALSEY.

8. *Descriptive Geometry.*—A study of the line, point and the plane; single curved, double curved and warped surfaces; tangent lines and tangent planes; intersections of lines, planes and solids; shades, shadows and perspective. Two lectures and one problem period per week throughout the year. Three credits. Assistant Professor DOUGHERTY.

GREEK

See Classical Language.

HISTORY

CHARLES CLINTON SWISHER, Ph.D., LL.D.....Professor
LEVI RUSSELL ALDEN, A.M., LL.B.....Assistant Professor
GEORGE MORTON CHURCHILL, Ph.D.....Assistant Professor
WILLIAM LAWRENCE WANLASS, A.B.....Assistant

First Section. Primarily for Undergraduates

1. *Mediaeval History.*—A history of the settlement of the Germanic tribes in the territory of the Empire, with a study of feudal institutions, extending through the movements of the Crusades; texts, with assigned readings. First half-year. *Mon., Wed., Fri.*, at 2.45. One and one-half credits. Professor SWISHER.

2. *Mediaeval History.*—A history of the evolution of national government extending through the periods of the Renaissance and the Protestant Revolution; texts and assigned readings. Second half-year. One and one-half credits. *Mon., Wed., Fri.*, at 2.45. Professor SWISHER.

3. *Modern European History.*—A study of the European States under the new conditions resulting from the discovery of America and the

opening of the oriental trade routes, extending through the period of the French Revolution; texts, lectures, and collateral readings. First half-year. *Mon., Wed., Fri.*, at 3.45. One and one-half credits. Professor SWISHER.

4. A continuation of the preceding through the revolutionary movements of the nineteenth century, with a more detailed study of recent issues; texts, lectures, and collateral readings. Second half-year. *Mon., Wed., Fri.*, at 3.45. One and one-half credits. Professor SWISHER.

5. *Mediaeval History.*—Parallel with Course 1. First half-year. *Tue., Th., Sat.*, at 5.50. One and one-half credits. Professor SWISHER.

6. *Mediaeval History.*—Parallel with Course 2. Second half-year. *Tu. Th. Sat.*, at 5.50. One and one-half credits. Professor SWISHER.

Second Section. For Undergraduates and Graduates

20. *American History.*—A study of the formation of the Union and the subsequent history of the United States to date, with particular attention to those factors which have tended to develop or retard the growth of American nationality; text-book, lectures and special reports. *Tu., Th., Sat.*, at 11.15. Three credits. Assistant Professor ALDEN.

25. *English History.*—A general course in English history with special attention to constitutional and political development. Texts, lectures, and collateral reading. *Mon., Wed., Fri.*, at 5.00. Three credits. Assistant Professor CHURCHILL.

30. *American Constitutional History.*—A history of the origin and development of the Federal Constitution of 1789, with a study of its interpretation under the pressure of party issues. Lectures, text-books, and collateral readings. *Tu., Th., Sat.*, at 5.00. Three credits. Professor SWISHER.

31. *Modern European History.*—A study of the French Revolution and subsequent reaction extending the Revolution of 1848. First half-year. *Tu., Th., Sat.*, at 5.00. One and one-half credits. Not given in 1916–17. Professor SWISHER.

32. *Modern European History.*—From 1850 to the present time. Second half-year. *Tu., Th., Sat.*, at 5.00. Professor SWISHER.

33. *Current History.*—A discussion of political questions of the day, with special reference to their origin and historical significance. Lectures throughout the year. *Sat.*, at 11.15. One credit. Professor SWISHER.

Third Section. Primarily for Graduates

54. *Seminar Work.*—The results of individual research, conducted by graduate students upon assigned topics, will be discussed at the weekly meetings of the seminars of American and Modern European History.

Undergraduate students qualified by previous historical study, who desire to do intensive work with a view to gaining fuller information

upon special periods or facility in the use of historical materials, may, with the approval of the instructor, be admitted to the historical seminars. Regular meeting of Seminar, Saturday, 12.15–2.15. Three credits. Professor SWISHER, Assistant Professor ALDEN, and Assistant Professor CHURCHILL.

INTERNATIONAL LAW AND DIPLOMACY

See Political Science.

LATIN

See Classical Languages.

MATHEMATICS

HOWARD LINCOLN HODGKINS, Ph.D.....Professor
H. GRANT HODGKINS, A.B.....Instructor

First Section. Primarily for Undergraduates

3. *College Algebra; Solid Geometry; Plane Trigonometry.*—Algebra is studied during the first half-year, solid geometry during February and March, and trigonometry during April and May. *Mon., Wed., Fri.*, at 9.15. Three credits. Professor HODGKINS.

4. *Algebra; Plane Trigonometry.*—Algebra is studied until April 1, and trigonometry during April and May. *Mon., Wed., Fri.*, at 5.00. Three credits. Mr. HODGKINS.

6. *College Algebra; Solid Geometry; Plane Trigonometry.*—Parallel with Course 3. *Mon., Wed., Fri.*, at 5.50. Three credits. Mr. HODGKINS.

9. *Trigonometry; Analytic Geometry.*—Trigonometry until Jan. 1, analytic geometry for the remainder of the session. The completion of Course 3, 4, or 6 is requisite for admission to this course. *Mon., Wed., Fri.*, at 10.15. Three credits. Professor HODGKINS.

12. *Trigonometry; Analytic Geometry.*—Parallel with Course 9. Section A. *Mon., Wed., Fri.*, at 5.50. Section B. *Tu., Th., Sat.*, at 5.50. Three credits. Professor HODGKINS.

Second Section. For Undergraduates and Graduates

20. *Differential and Integral Calculus; Elements of differential equations. Tu., Th., Sat.*, at 5.00. Three credits. Professor HODGKINS.

21. *Differential and Integral Calculus; Elements of differential equations. Tu., Th., Sat.*, at 9.15. Three credits. Professor HODGKINS.

Third Section. Primarily for Graduates

50. *Differential Equations.—Mon., Fri.*, at 11.15. Two credits. Professor HODGKINS.

MECHANICAL ENGINEERING

ROBERT WILBUR MORSE, S.B. ..... Assistant Professor
MARK RITTENHOUSE WOODWARD, B.S. in E.E. ..... Assistant Professor
WILLIAM DARRACK HALSEY, A.B. ..... Instructor
HAYNER HASKELL GORDON, E.E., Ph.D. ..... Instructor

First Section. Primarily for Undergraduates

1. *Mechanism.*—A course in the systematic study of the kinematics of machinery, in which mechanical movements are reduced to scientific analysis. Carefully developed problems and diagrams of changes of position and speed in mechanisms are constantly used.

Some attention is given to the design of gear teeth, and twenty-five hours in the second term are devoted to valve gears for steam engines. Three lectures and one drawing period. Four credits. Mr. HALSEY.

6. *Engineering Drawing.*—This course provides for the application of the principles taught in the courses of Mechanism and Steam Engineering to specific problems. Practice is given in the design of valve gears and quick return motions, and in the determination of velocity diagrams for special engine and other linkages. There is also included the complete working drawings for a steam boiler. Two three-hour periods. Two credits. Assistant Professor MORSE.

7. *Machine Design.*—This course is an application of principles already acquired to problems in design, each student being required to complete every detail of the design undertaken.

The subjects taken as design problems are:

The complete design of a horizontal single cylinder gas engine, or the design of a steam boiler, a series of shaft couplings, and a fly wheel.

The constructive details and calculations are discussed and the limitations of theoretical and empirical formulas pointed out. One lecture-recitation hour and five hours in the drawing room. Two credits. Assistant Professor MORSE.

9. *Engineering Laboratory.*—A course of practical work in testing general engineering apparatus for efficiency. The work consists in indicating steam engines; determining the evaporative efficiency of boilers; tests on the strength of materials; measurement of the flow of water; gas-engine brake tests; refrigeration tests, and fuel value determinations. Two three-hour periods, second half-year. One credit. Assistant Professor MORSE and Mr. HALSEY.

10. *Engineering Laboratory.*—This course is a completion of Course 9. Two three-hour periods. Two credits. Assistant Professor MORSE and Mr. HALSEY.

Second Section. For Undergraduates and Graduates

20. *Thermodynamics.*—This course deals with the principles of thermodynamics; the theoretical gas and vapor cycles and the properties of steam. The application of the theoretical vapor cycles to the prac-

tical steam engine is discussed. Three hours, first half-year. One and one-half credits. Mr. HALSEY.

21. *Engines, Boilers, and Power Plant Accessories.*—This course deals with the practical steam and gas engine and steam turbine boilers, condensers, feed pumps, economisers, stokers, and other power plant accessories. Three hours, second half-year. One and one-half credits. Mr. HALSEY.

22. *Gas Engines and Compression and Refrigeration Machinery*—This course deals with the theory and practice concerning the internal combustion motor. During the second half of the term the theories and principles involved in compression machinery and artificial refrigeration will be discussed. Two hours. Two credits. Dr. GORDON.

23. *Hydraulic Machinery.*—This course provides for an elementary study of hydraulic prime movers and pumping machinery. It includes a discussion of the theory and design of turbines and turbine blades for low and high heads, and turbine governors.

The course will also treat of impulse wheels; water motors of the piston type; machinery for the utilization of hydraulic pressure; hydraulic pressure pumps, and hydraulic presses; hydraulic tools; pumps operated by steam, electricity, or power; and high duty pumps and water meters. Two hours, second half-year. One credit. Assistant Professor MORSE.

24. *Cotton Machinery and Machine Tools.*—A study of the mechanisms found in cotton machinery and machine tools. Two hours. Assistant Professor MORSE.

26. *Dynamics of Machinery.*—A course including a number of the principal applications of dynamics to moving machinery, such as governors, fly-wheels, and the effect of the reciprocating parts of the steam engine. Two hours. Two credits. Assistant Professor MORSE.

27. *Power-Plant Design.*—This course provides for the design with complete plans and specifications of a power plant of industrial proportions by the student. One lecture-recitation hour and two three-hour drawing periods, first half-year. One and one-half credits. Dr. GORDON.

28. *Industrial Management.*—A course dealing with the business systems of manufacturing establishments.

The work includes a study of the organization and relations of the various departments of an industrial establishment, both in the office and in the workshop. It also discusses the conduct of accounts, the method of superintendence and of compensating labor, the determination of the cost of production, and the effect on costs of different systems of distributing indirect expenses. Two hours. Two credits. Assistant Professor MORSE.

29. *Heating and Ventilating.*—This course deals with the elementary principles underlying the subject of heating and ventilating. Furnace heating, direct and indirect steam heating, hot water heating, and the ventilating of different types of buildings are discussed. Two hours, second half-year. One credit. Mr. HALSEY.

Third Section. Primarily for Graduates

50. *Advanced Machine Design.*—Three credits. Assistant Professor MORSE.

51. *Advanced Power Plant Design.*—Three credits. Assistant Professor WOODWARD.

METEOROLOGY

WILLIS LUTHER MOORE, D.Sc., LL.D.....Professor
WILLIAM JACKSON HUMPHREYS, Ph.D.....Professor

Third Section. Primarily for Graduates

50. *Applied Meteorology.*—Investigation of the underlying laws governing meteorological phenomena and of the methods employed in practice for their interpretation and applications. Five credits. Professor MOORE.

51. *Meteorological Physics.* This course presupposes collegiate training in general physics. Particular attention will be given to the interpretation of meteorological phenomena in the light of modern physics; and those wishing to make this their principal study will be assisted in the selection of a suitable problem for investigation and advised in the collection of data necessary to its solution. Five credits. Professor HUMPHREYS.

NAUTICAL SCIENCE

GEORGE WASHINGTON LITTLEHALES, C.E.....Professor

First Section. Primarily for Undergraduates

1. *Nautical Science.*—Navigation; nautical astronomy; nautical almanac; production and use of nautical charts; tides; applications of meteorology, terrestrial magnetism and oceanography to navigation; deviation of the compass in iron and steel ships; theory and use of instruments of navigation. Two credits. Professor LITTLEHALES.

Third Section. Primarily for Graduates

50. *Nautical Science.*—Special investigations requiring original thought in relation to avenues of progress, such as the neutralization of the effects of the ship's magnetism upon the compass, the development of the gyroscopic compass, the supplying of means to enable seamen to make astronomical observations at night or when the horizon is hidden from view. Conferences, assigned readings, direction of research. Three credits. Professor LITTLEHALES.

PHILOSOPHY AND PSYCHOLOGY

WILLIAM CARL RUEDIGER, Ph.D.....Professor
SHEPHERD IVORY FRANZ, Ph.D.....Professor
EDWARD ELLIOTT RICHARDSON, Ph.D.....Professor
HARRIET UNDERWOOD, A.B.....Assistant

First Section. Primarily for Undergraduates

1. *General Psychology.*—An introductory study of the principal facts and laws of the mental life. First half-year. *Mon., Wed., Fri.*, at 10.15. One and one-half credits. Professor RUEDIGER.

2. *General Psychology.*—Parallel with Course 1. First half-year. *Mon., Wed., Fri.*, at 5.00. One and one-half credits. Professor RUEDIGER.

3. *Logic.*—A study of the thinking process, the principles of deductive and inductive inference, and the nature, structure, and organization of knowledge. Second half-year. *Mon., Wed., Fri.*, at 10.15. One and one-half credits. Professor RUEDIGER.

4. *Logic.*—Parallel with Course 3. Second half-year. *Mon., Wed., Fri.*, at 5.00. One and one-half credits. Professor RUEDIGER.

(Courses 1 and 3, or 2 and 4 are intended to satisfy the requirements in Psychology and Logic of Groups I to IV (pp. 69–70). They are introductory to the remaining courses in Philosophy and Education, and should be taken in the Sophomore year by students intending to pursue advanced courses or courses in Education.)

Second Section. For Undergraduates and Graduates

20. *History of Philosophy.*—The more important epochs in the history of thought. Attention is directed to the relation of these distinctive periods to the course of the world's progress. First half-year. *Tu., Th., Sat.*, at 10.15. One and one-half credits. Professor RICHARDSON.

21. *Ethics.*—A historical and theoretical course, with the aim of acquainting the student with the principal ethical theories. Reference is made to the application of these theories to concrete conditions. Second half-year. *Tu., Th., Sat.*, at 10.15. One and one-half credits. Professor RICHARDSON.

22. *Ethics.*—Similar to course 21. Second half-year. *Mon., Wed.*, at 5.50. One credit. Professor RICHARDSON.

24. *History of Philosophy.*—The development of philosophy, its nature and problems. This course while introductory is designed to be comprehensive and to give the student a general survey of the philosophic field. *Tu., Th.*, at 5.00. Two credits. Professor RICHARDSON.

25. *Experimental Psychology.*—An introductory laboratory course. Experiments on sensation, movement, effects of practice, memory and association, emotional manifestations, etc., and practical work with the Binet and other mental tests. To be taken by graduate students who

have not had experimental psychology and who are taking a major or minor in psychology. *Sat.*, 9.15–11.15. One credit. Professor RUEDIGER and Miss UNDERWOOD.

27. *Recent Philosophical Movements.*—A consideration of the various philosophical movements and tendencies of the immediate past. A critical study of the occasion and meaning of the trend of thought at the present time. Lectures and reading of recent books and periodicals. *Wed.*, at 5.00. Not given in 1916–17. One credit. Professor RICHARDSON.

28. *Philosophy of Nature.*—A critical examination of the concepts of physical science. An investigation of the significance of scientific laws and theories. *Wed.*, at 5.00. One credit. Professor RICHARDSON.

(Courses 27 and 28 are given in alternate years.)

29. *Problems of Philosophy.*—An advanced course dealing with philosophical questions from the standpoint of the questions themselves rather than as these have been presented historically. A critical and constructive examination of fundamental philosophic principles and problems. Lectures, readings and reports. First half-year. *Mon., Wed.*, at 5.50. One credit. Professor RICHARDSON.

Third Section. Primarily for Graduates

50. *Seminar in Psychology.*—During the year 1916–17 this course will be combined with Education 50. Professor RUEDIGER.

51. *Metaphysics.*—The principles of metaphysics and the problems of philosophy. An advanced course tracing the origin and development of metaphysical questions, and a critical examination of the attempted solution of these problems. Readings, conferences and written reports. Three credits. Professor RICHARDSON.

52. *Advanced Experimental, Abnormal or Physiological Psychology.*—Course to be altered in different years in accordance with the needs of students. Prerequisite—courses in general psychology, and introductory experimental psychology. Conferences, reading of recent literature, and demonstrations. Five credits. Professor FRANZ.

53. *Research in Psychology.* Advanced students, who select psychology as major or minor for the degree of A.M. or Ph.D., will be given special topics for investigation in abnormal, physiological or experimental psychology. To be preceded or accompanied by Course 52 or its equivalent. Five credits. Professor FRANZ.

PHYSICS

MORTON C. MOTT-SMITH, Ph.D. ..... Assistant Professor
CHARLES EDWIN VAN ORSTRAND, S.M. ..... Lecturer
HARVEY LINCOLN CURTIS, Ph.D. ..... Lecturer

First Section. Primarily for Undergraduates

1. *General Physics.*—A recitation and lecture course, embracing the fundamental principles of mechanics, sound, heat, light, and electricity. The lectures are illustrated by experiments. This is a required course for Sophomores in Engineering, and may be elected by the general student who has completed Mathematics 9 or 12. *Mon., Wed., Fri.*, at 5.00. Three credits. Assistant Professor MOTT-SMITH.

2. *Laboratory Physics.*—A selected series of experiments, mainly quantitative. Two two-hour periods. *Tu., Th.*, at 10.15 or *Tu., Th.*, at 7.30. Two credits. Assistant Professor MOTT-SMITH, and Assistants.

3. *Introductory General Physics.*—A lecture and recitation course, similar to Course 1, but less mathematical, and planned with reference to the needs of the general student. *Mon., Wed., Fri.*, at 1.45. Three credits. Assistant Professor MOTT-SMITH.

Second Section. For Undergraduates and Graduates

21. *Heat and Thermodynamics.*—A recitation and lecture course, based on Preston's Theory of Heat and Ennis' Applied Thermodynamics. *Mon., Wed., Fri.*, at 5.50. Three credits. Assistant Professor MOTT-SMITH.

22. *Light.*—A recitation and lecture course, based on Preston's Theory of Light and Schuster's Theory of Optics. Three credits. Not given in 1916–17. Assistant Professor MOTT-SMITH.

Third Section. Primarily for Graduates

57. *Statistical Mechanics and Kinetic Theory.*—This course includes Gibb's preliminary derivation of the fundamental equations of thermodynamics and a discussion of the physical properties of gases from the standpoint of general dynamics. Viscosity, diffusion, heat conduction, Brownian movements, Van der Waal's equations and molecular aggregation and dissociation. Gibb's Statistical Mechanics and Jean's Dynamical Theory of Gases. A lecture and seminar course. *Monday* at 4.50. Three credits. Mr. VAN ORSTRAND.

58. ELASTICITY. The physical properties of solids as applied to problems in geophysics. Homogeneous stress and strain. Potential energy of strained solids. Transmission of force. Propagation of earthquake waves. Love's Mathematical Theory of Elasticity. A lecture and seminar course. *Friday* at 4.50. Three credits. Mr. VAN ORSTRAND.

59. *Theoretical Electricity.*—A lecture course on the Mathematical theory of Electricity, using J. J. Thomson's Elements of Electricity and Magnetism as a basis. The fundamental propositions of electrical theory are discussed, and their applications to practical problems are pointed out. The solution of a number of problems is also required. Three credits. Dr. CURTIS.

60. *Least Squares.* Derivation of the law of errors and adjustment of observations with special reference to the determination of the constants of empirical formulas. Merriman's Method of Least Squares. A lecture and recitation course. First half-year. *Monday* at 4.50. Not given in 1916–17. One credit. Mr. VAN ORSTRAND.

61. *Conduction of Heat.*—Fourier's analysis is applied to numerous problems in the diffusion of heat and substances. Ingersoll and Zobel's Mathematical Theory of Heat Conduction. A lecture and recitation course. Second half-year. *Mon.*, at 4.50. One credit. Not given in 1916–17. Mr. VAN ORSTRAND.

POLITICAL SCIENCE

CHARLES HERBERT STOCKTON, LL.D.....In charge of Department
LESLIE CLEVELAND MCNEMAR, A.B. (To September 1, 1916),
Assistant Professor
WILLIAM MILLER COLLIER, A.M.....Lecturer

First Section. Primarily for Undergraduates

1. *Elements of Political Science.*—An elementary course designed to familiarize the student with the nature and scope of politics as a science; the origin, nature and functions of the state; the distinction between sovereignty and government; the distribution of powers, and particularly the relation of the individual to the state and the attendant obligations of citizenship. Recommended as a prerequisite to the succeeding courses. Text-book and lectures. First half-year. *Tu., Th., Sat.*, at 10.15. One and one-half credits.

2. *European Governments.*—A comparative study of the political organization of the principal states of Europe, involving a classification of the state, and the nature of its government on the basis of the source of power; further, an examination of the relation of the executive, legislative and judiciary departments, to each other, and the nature of the party system in each. Text-book and lectures. Second half-year. *Tu., Th., Sat.*, at 5.00. Alternates with Pol. Sci. 4. Not given in 1916–17. One and one-half credits.

4. *Political Parties and Party Problems in the United States.*—A study of the organization and methods of action; growth of the party system; primary and convention system; permanent party organization; elements of cohesion in parties; reform movements and measures; theories of the party system. Text-book, assigned readings and lectures. Second half-year. *Tu., Th., Sat.*, at 10.15. Alternates with Pol. Sci. 2. One and one-half credits.

Second Section. For Undergraduates and Graduates

21. *American Government.* A study of the governmental system of the United States; origin, adoption, and growth of the federal Consti-

tution; the relation of the Federal to the State governments, and their organization; the basis of suffrage, influence of public opinion, and political parties. Recommended as a prerequisite to the succeeding courses. Text-book, lectures, and assigned readings. First half-year. *Tu., Th., Sat.*, at 5.00. One and one-half credits.

22. *Federal Government.*—A study of the political problems involved in the organization of the federal government under the present Constitution, including foreign relations, concentration of power, centralization or responsibility, relation of the executive, legislative and judiciary departments, and the importance of their subdivisions. Text-book, lectures, and assigned readings. Not given in 1916–17. Second half-year. *Tu., Th., Sat.*, at 11.15. Alternates with Pol. Sci. 23. One and one-half credits.

23. *Municipal Government in the United States.*—A study of the relation of the city to the state and the nation, including the source of power, their organization and administration; the problems arising from rapid growth, powers and liabilities, their influence upon politics, and the necessity for scientific administration as economic units. Text, lectures, and assigned readings. Second half-year. *Tu., Th., Sat.*, at 5.00. Alternates with Pol. Sci. 22. One and one-half credits.

24. *Constitutional Law.*—An elementary course on the sources of Constitutional Law and its enforcement; the relation of and restrictions upon the Federal and State Governments; private rights and immunities; the regulation of commerce, police, taxation, etc. Lectures, textbook and assigned readings. First half-year. *Tu., Th., Sat.*, at 11.15. Not given in 1916–17. One and one-half credits.

27. *Political History of Modern Europe, 1850 to the Present.*—A concise study of the *political* development of the principal European states dealing primarily with the causes and effects involved in the struggle for national unity, with special attention to political organization, the forms of government, and the policies of larger European interest such as colonization and international relations in South America, Asia, and Africa. Text-book and lectures. First half-year. *Tu., Th., Sat.*, at 5.00. Alternates with Pol. Sci. 28. Not given in 1916–17. One and one-half credits.

28. *Political History of South America, 1810 to the Present.*—A general study of the *political* development of the States of South America, individually and collectively, dealing primarily with the causes and effects involved in their struggle for national, economic, social and political development, with special attention to the questions of foreign relations. Text-book and lectures. Second half-year. Alternates with Pol. Sci. 27. One and one-half credits. *Tu., Th., Sat.*, at 11.15.

29. *Principles of International Law.*—A concise study of the nature, sources and sanctions of International Law. The laws of peace deal with the origin, classification, and essential rights and duties of states but not diplomatic relations; the laws of war deal with the sources and general relations between belligerents together with the rights and duties of neutrals. Lectures, text, assigned cases and additional

readings and papers on selected topics. First half-year. *Mon., Wed., Fri.*, at 5.00. One credit. Lectures and assigned readings, President STOCKTON, supplemented by case instruction by an assistant.

30. *Elements of Diplomacy and Diplomatic Usage.*—A thorough study of the general principles of diplomatic usage; the history and organization of the Department of State; the rights, privileges and immunities of diplomatic and consular officers; the preliminaries, drafting, signing, and ratification of treaties, and an investigation of other amicable means for settling International Differences. Lectures, text, assigned cases and additional readings and papers on selected topics. Second half-year. *Mon., Wed., Fri.*, at 5.00. One credit. Lectures and assigned readings, President STOCKTON and Mr. COLLIER, supplemented by case instruction by an assistant.

31. *Government of England.*—A detailed study of the English governmental system compared with the presidential system of the United States. The organization, functions and procedure, of the crown and the ministry, parliament (particularly the House of Commons), political parties, the judiciary, and local government will be clearly shown. Text and assigned reading. First half-year. *Tu., Th., Sat.*, at 11.15. One and one-half credits.

Third Section. Primarily for Graduates

56. *Seminar in Political Science.*—Students competent to undertake advanced work are admitted to this seminar for the presentation and discussion of essays and topics belonging to the field of political science. Hours and credit to be arranged for the work each half year. One hour per week. Two credits. Assistant Professor MCNEMAR.

PREVENTIVE MEDICINE

EDWARD LYMAN MUNSON, A.M., M.D.....Professor

Third Section. Primarily for Graduates

50. A seminar course dealing with vital statistics; etiology and prevention of infectious diseases; causes and prevention of infant mortality; prevention of disease of occupation; protective inoculations; municipal hygiene; national and interstate preventive measures. Five credits. Professor MUNSON.

ROMANCE LANGUAGES AND LITERATURES

GEORGE NEELY HENNING, A.M.....Professor
EDWARD CULLOM, A.M. (To September 1, 1916)...Instructor in French
WALTER COLCORD JOHN, A.M.....Instructor in Spanish
CECIL KNIGHT JONES, Lit.B. (To September 1, 1916),
Instructor in Spanish
JULES MAILLET.....Instructor in French
HENRY GRATTAN DOYLE, A.M. (From September 1, 1916),
Instructor in Romance Languages

French

First Section. Primarily for Undergraduates

1. *First-Year Course.*—Fraser and Squair's French Grammar. Grammar, composition, drill in pronunciation, translation and reading of modern French fiction, comedy and history. For beginners. *Tu., Th., Sat.*, at 9.15. Three credits. Mr. Doyle.

2. *First-Year Course.*—Parallel with Course 1. Fraser and Squair's French Grammar. For beginners. Section A. *Mon., Wed., Fri.*, at 5.50. Section B. *Tu., Th., Sat.*, at 5.50. Three credits. Mr. Doyle.

3. *Second-Year Course.*—Fraser and Squair's French Grammar. First text, Feuillet, "Le roman d'un jeune homme pauvre" (Heath); other texts to be announced. Open to students who have passed in French 1 or 2, or have fulfilled the admission requirements in Elementary French. *Mon., Wed., Fri.*, at 10.15. Three credits. Professor Henning.

4. *Second-Year Course.*—Parallel with Course 3. Fraser and Squair's French Grammar. First text, Feuillet, "Le roman d'un jeune homme pauvre" (Heath); other texts to be announced. *Tu., Th., Sat.*, at 5.00. Three credits. Professor Henning.

5. *General Survey of Modern French Literature* (Nineteenth, Eighteenth and Seventeenth Centuries).—Translation, collateral reading and reports thereon, lectures on literature and the history of the language, composition. Open to students who have passed in Course 3 or 4, or have fulfilled the admission requirements in Advanced French. *Mon. Wed., Fri.*, at 3.45. Three credits. Professor Henning.

6. *Parallel with French 5*, but omitting composition and the lectures on the history of the language. *Tu., Th., Sat.*, at 5.50. Three credits. Professor Henning. (This course will be given only if elected by at least six students at the beginning of the year.)

7. *Conversation and Composition.*—Open to students who have passed in French 1 or 2, or have fulfilled the admission requirements in Elementary French, or otherwise satisfy the instructor of their fitness to take it. *Mon., Wed., Fri.*, at 5.00. Two credits. Mr. Maillet.

Second Section. For Undergraduates and Graduates

Courses in this group are open to students who have passed in Course 5 or 6, or otherwise satisfy the instructor of their fitness to take them.

21. *Literature of the Seventeenth Century.*—History, philosophy, criticism, memoirs, letters, eloquence, drama, fiction, poetry. Balzac, Boileau, Corneille, Descartes, Fénelon, Mme de la Fayette, LaBruyère, La Fontaine, La Rochefoucauld, Malherbe, Molière, Pascal, Racine, Saint-Évremond, Saint-Simon, Mme de Sévigné, etc. Translation, collateral reading and reports thereon, lectures on literature and history. (Given in 1918–19.)

26. *Literature from 1800 to 1850.*—History, criticism, travels, fiction, drama, lyric poetry. Balzac, Baudelaire, Chateaubriand, Gautier, Hugo, Lamartine, Michelet, Musset, Sainte-Beuve, George Sand, Thierry, Vigny, etc. Translation, collateral reading and reports thereon, lectures on literature and history. *Mon., Wed., Fri.*, at 2.45. Three credits. Professor HENNING.

28. *Literature from 1850 to the Present.*—History, philosophy, criticism, fiction, drama, lyric poetry. Augier, Brunetière, Daudet, Dumas fils, Flaubert, France, Heredia, Hervieu, Leconte de Lisle, Lemaître, Loti, Maeterlinck, Maupassant, Mérimée, Renan, Rostand, Sully Prudhomme, Taine, Verlaine, etc. (Given in 1917–18.)

Third Section. Primarily for Graduates

50. One course will be arranged for competent graduates. *Mon., Wed., Fri.*, at 5.00. Three credits. Professor HENNING.

Spanish

First Section. Primarily for Undergraduates

1. *First-Year Course.*—Hills and Ford's Spanish Grammar. Grammar, composition, drill in pronunciation, translation of modern Spanish fiction, comedy and history. Open to Freshmen only by permission of the instructor. For beginners. *Mon., Wed., Fri.*, at 1.45. Three credits. Mr. JOHN.

2. *First-Year Course.*—Parallel with Course 1. Hills and Ford's Spanish Grammar. Open to Freshmen only by permission of the instructor. For beginners. *Mon., Wed., Fri.*, at 5.00. Three credits. Mr. DOYLE.

3. *Second-Year Course.*—Review of grammar, composition, translation of modern Spanish prose and poetry, collateral reading. Open to students who have passed in Course 1 or 2, or have fulfilled the admission requirements in Elementary Spanish, or otherwise satisfy the instructor of their fitness to take the course. *Mon., Wed., Fri.*, at 10.15. Mr. DOYLE.

4. *Second-Year Course.*—Parallel with Course 3. *Tu., Th., Sat.*, at 5.00. Three credits. Mr. DOYLE.

HISTORY OF SCIENCE

GEORGE SARTON, D.Sc.....Lecturer

A course of twenty-five lectures on the History of Science by Dr. Sarton of the University of Ghent. Once a week according to announcement.

SUMMER SCHOOL

1916

CALENDAR

June	24	*Saturday*—Registration, 10–12 a.m.; 4–6 p.m.
June	26	*Monday*—Instruction begins in all courses.
July	4	*Tuesday*—Holiday.
July	8	*Saturday*—Classes meet at the usual hours.
August	4–5	*Friday and Saturday*—Examinations.

FACULTY

CHARLES HERBERT STOCKTON, LL.D.....President of the University
WILLIAM CARL RUEDIGER, Ph.D.....Director of the Summer School
LÆVI RUSSELL ALDEN, A.M.....Assistant Professor of History
PAUL BARTSCH, Ph.D.....Professor of Zoology
RAY SMITH BASSLER, Ph.D.....Professor of Geology
GERTRUDE RICHARDSON BRIGHAM, A.M.,
Smithsonian Institution, English
JAMES HAROLD COLLINS, M.D.....Associate Professor of Physiology
EDWARD CULLOM, A.M.....Instructor in French
SHEPHERD IVORY FRANZ, Ph.D., LL.D., M.D..Professor of Physiology
HARRY GRANT HODGKINS, A.B.....Instructor in Mathematics
HOWARD LINCOLN HODGKINS, Ph.D...Dean of the Department of Arts and Sciences and Professor of Mathematics
WALTON COLCORD JOHN, A.M.....Instructor in Spanish
ROBERT RUSS KERN, A.B.....Professor of Economics
JULES MAILLET.....Instructor in French Conversation
CHARLES E. RESSER, A.M.....Instructor in Geology
EDWARD ELLIOT RICHARDSON, M.D., Ph.D.....Professor of Philosophy
WILLIAM CARL RUEDIGER, Ph.D.,
Dean of Teachers College and Professor of Educational Psychology
WILLIAM CARSON RYAN, A.B.,
Editor United States Bureau of Education—Education
ALFRED FRANCIS WILLIAM SCHMIDT, A.M.....Professor of German
HERMANN SCHOENFELD, Ph.D., LL.D.....Professor of German
CHARLES SIDNEY SMITH, Ph.D.....Professor of Greek and Latin
JOSEPH DUERSON STOUT, Ph.D., M.D.....Professor of Pharmacology
OTIS DOW SWETT, S.B., LL.M.....Assistant Professor of Chemistry
HARRIET UNDERWOOD, A.B.....Assistant in Educational Psychology
WILLIAM ALLEN WILBUR, A.M.,
Dean of Columbian College and Professor of English
MARK RITTENHOUSE WOODWARD, E.E.,
Assistant Professor Electrical Engineering

SCHEDULE OF CLASSES

All classes meet five times a week, Saturdays being free, except that on Saturday, July 8, classes will meet at the usual hours.

Friday and Saturday, August 4 and 5, will be given over to examinations. No final examinations may be given before those days.

If desired, the classes scheduled for eight o'clock will begin ten or fifteen minutes before eight so as to close fifteen or twenty minutes before nine.

Of the courses marked with a star (*), only those will be given for which seven or more students have applied by June 5.

8– 9	Ornithology	2 credits	Professor Bartsch
	English Composition	1 credit	Miss Brigham
	Shakespeare's English Historical Plays	1 credit	Professor Wilbur
9–10	Philosophy	1 credit	Professor Richardson
	Psychology	1 credit	Professor Ruediger
	Current Educational Problems	1 credit	Mr. Ryan
	*College Algebra	1½ credits	Professor Hodgkins
10–11	Logic	1 credit	Professor Richardson
	Economics	1 credit	Professor Kern
	Principles of Education	1 credit	Professor Ruediger
	*Plane Trigonometry	1 credit	Professor Hodgkins
11–12	*Laboratory Course in Mental Tests, etc.	1 credit	Miss Underwood
11–12	*German III	1½ credits	Professor Schoenfeld
	Sociology	1 credit	Professor Kern
	*Greek A II	1 credit	Professor Smith
4– 5	American History	1½ credits	Assist. Professor Alden
	French Conversation	1 credit	Mr. Maillet
5– 6	German II	1½ credits	Professor Schmidt
	French I	1½ credits	Mr. Cullom
	Spanish I	1½ credits	Mr. John
	College Algebra	1½ credits	Mr. Hodgkins
	American Government	1 credit	Assist. Professor Alden
	*Physical Geography	1 credit	Mr. Resser
	Principles of Teaching	1 credit	Professor Ruediger
5– 7	English Rhetoric	2 credits	Professor Wilbur
	Physiology	2 credits	Professors Franz, Stout and Collins
5–10	General Laboratory Chemistry	2 credits	Assist. Professor Swett
	*Organic Experiment and Inorganic Preparations	2 credits	Assist. Professor Swett
	*Qualitative Analysis	2 credits	Assist. Professor Swett

6– 7	German I.....	1½ credits	Professor Schmidt
	French II.....	1½ credits	Mr. Cullom
	Spanish II.....	1½ credits	Mr. John
	*Physics.....	1½ credits	Assist. Professor Woodward
	*Mineralogy.....	1 credit	Professor Bassler and Mr. Resser
	Plane Trigonometry.....	1 credit	Mr. Hodgkins

REGULATIONS

In obedience to many requests for summer study in Washington received in recent years, George Washington University will conduct a six weeks' Summer School from June 26 to August 5, 1916.

The opportunities for culture that may be enjoyed in Washington are unrivaled. The libraries, museums, and Government buildings are open daily for inspection and study, and both the city and vicinity are replete with places of historic interest. The knowledge of the nation's capital and its environs that may be gained during a six weeks' sojourn is alone no small part of a liberal education, and when this is combined with educational opportunities of the first order, the situation becomes ideal.

WORK OFFERED

Thirty-three different courses of study are offered. These are all of college grade, are given by regular members of the faculty or others experienced in college teaching, and represent essentially all the subjects of study found in the Department of Arts and Sciences.

If a sufficient demand is expressed by August first, the courses in First-year and Second-year German and in First-year and Second-year Spanish will be extended beyond the session of the Summer School so as to cover a full year of work in each course. If it is decided to extend these courses, *students wishing to take the extended portions should register for them in the Director's office by August third.*

The attention of prospective students is called to the courses marked with a star (*). Of these courses only those will be given for which a minimum of seven students have made application by June fifth.

If courses not announced in this Bulletin are desired an effort will be made to provide them if a sufficient demand is expressed by June first.

ADMISSION

No examination or certificates of work completed in secondary schools will be required for admission to the Summer School, but no student will be allowed to register for any except an elementary course until he has given evidence satisfactory to the instructor concerned or to the Director that he is qualified to pursue the course to advantage.

REGISTRATION

The work in all classes will begin promptly on Monday, June 26, at the hours scheduled and registration should be completed before that time. The Director will be in his office to receive registrations daily from 10–12 a.m. and 4–6 p.m., June 20–24, and on June 24 all the instructors may be found for consultation in their respective classrooms either in the forenoon or late afternoon.

Students registering after June 29 will be charged a late registration fee of $5.00. The Director is authorized to remit this fee only in the case of teachers and others whose employment unavoidably prevents them from registering before that date.

Students devoting all their time to study should be able to carry readily three credit-hours of work. No student may register for more than four credit-hours.

CREDIT

The units of credit in year-hours carried by the several courses are indicated both in the schedule of classes on page 123 and in the descriptive outlines of the courses on pages 127–131. A unit of work, yielding a unit of credit, is defined as consisting of 30 class exercises, 30 two or three-hour laboratory periods, or a corresponding combination of the two. This is equivalent to a course meeting once a week throughout the year, or twice a week throughout a semester, during the regular session of the University.

The courses in American History, College Algebra, French, German, Physics and Spanish, while meeting for only 30 stated periods, will, when satisfactorily completed, each yield 1½ units of credit. Through extra heavy assignments, the amount of work covered in each of these courses will be made fully equivalent to the work covered in the corresponding courses meeting three times a week for one semester during the regular session of the University.

Work satisfactorily completed in the Summer School will be accredited toward a degree at George Washington University on the same basis as work completed during the regular session, but in no case will a student be accredited with more than four units completed in one six weeks' session of the Summer School.

CERTIFICATES

Certificates of attendance and of work satisfactorily completed will be issued on or about September 1.

FEES

Tuition fee per credit-hour	$10.00
Late registration fee	5.00

Laboratory fees:

Chemistry	10.00
Experimental Psychology	2.00
Mineralogy	5.00
Ornithology	5.00
Breakage deposit in chemistry for each course taken, the amount paid in excess of breakage to be returned	10.00

The matriculation fee of $5.00 due from students registering for the first time in any department of the University during the regular session is not applicable to the Summer School, but registration in the Summer School does not cancel the matriculation fee for students who may later register for the first time in the regular session of the University. Neither scholarships nor University and Ministerial aid are available to students in the Summer School.

PAYMENT OF FEES

All fees are due upon registration and are payable at the Treasurer's Office, 2024 G Street. Students who find it impossible to pay their fees by July 3 should consult the Director in respect to making a satisfactory postponement. No certificate of attendance or of credit will be issued unless all fees have been paid.

A student who is compelled through illness or other serious cause to withdraw before July 17 is entitled to a refund of one-half of the fees paid by him, but otherwise no reduction in the fees is made for withdrawal before the end of the session or for late entrance.

LIBRARY

The University Library, which is found in the first floor of the main building, will be open on school days from 8.30–12.30 and from 3–7, and on Saturday forenoons.

BOARD AND ROOMS

Living accommodations may be had for $6 a week and up. Rooms alone cost $2 a week and up. A register of suitable places is kept by the Treasurer from whom detailed information may be obtained.

ADDITIONAL INFORMATION

Additional information respecting the Summer School may be obtained by addressing,

W. C. Ruediger, *Director,*
George Washington University,
Washington, D. C.

COURSES OF INSTRUCTION

The letter S, meaning Summer, is prefixed to the numbers of courses to distinguish them from the courses offered during the regular session of the University. Courses corresponding approximately to those of-

fered during the regular session are given corresponding numbers. Courses not so corresponding are assigned Roman numerals. The letters a and b following some of the numbers signify correspondence respectively to first and to second semester work of the regular session.

Biological Science

S 23. *Ornithology.*—A systematic course embracing lectures and laboratory work. The lectures are illustrated with lantern slides, showing the home life of birds. The laboratory work consists in classifying bird skins, of which the University possesses an excellent series. Special attention is directed to the study of the birds of the District of Columbia, and to this end frequent field trips are taken. Lecture at 8.00; laboratory, two hours daily at the student's convenience. Two credits. Professor BARTSCH.

Chemistry

S 2. *General Laboratory Chemistry.*—A course in theoretical and descriptive chemistry based on a series of experiments and demonstrations. Daily 5–10. Two credits. Assistant Professor SWETT.

*S 3. *Organic Experiments and Inorganic Preparations.*—First twelve periods, experiments in organic chemistry; last eighteen periods, syntheses of inorganic compounds. Daily 5–10. Two credits. Assistant Professor SWETT.

*S 7. *Qualitative Analysis.*—A brief course intended primarily for students in engineering. Daily 5–10. Two credits. Assistant Professor SWETT.

Economics and Sociology

S 1a. *General Economics.*—An outline course in the principles of political economy, devoted mainly to the study of the processes of fixing market prices and to a study of the problems of rent, interest, wages, and profits. Daily at 10. One credit. Professor KERN.

S 22. *General Sociology.*—An outline course in the principles of sociology devoted mainly to the study of the organization of society, the social systems, their functions, efficiencies, and programs for their development. Daily at 11. One credit. Professor KERN.

Education

S 21a. *Principles of Teaching.*—A course in the principles underlying the teaching process. Among the topics considered are: The problem of gaining realness; motivation; the basal teaching exercises; development and instruction; questioning; good form in teaching; the art of study; measuring the results of teaching. Daily at 5. One credit. Professor RUEDIGER.

S 21b. *Principles of Education.*—A course in the bases, aims, values, and essential content of education. Among the topics considered are: The field of education; hereditary bases and limitations; the educa-

tional aim; the disciplinary conception; the elemental educational values; the curriculum and course of study. Daily at 10. One credit. Professor RUEDIGER.

*S 28. *Experimental Education.*—A laboratory course in the Binet and other mental tests, supplemented by experiments in the methods and processes of learning. Ample opportunities for acquiring skill in applying mental tests will be provided for each member of the class. Daily 10–12. One credit. Miss UNDERWOOD.

S XL. *Current Educational Problems.*—The course will include a brief review of such topics as: Reorganization of the educational system; the 'six-and-six'' plan; school surveys; educational measurements; the health movement in education; public and private agencies in educational advance; vocational training and guidance. Special attention will be paid to vocational aims. Daily at 9. One credit. Mr. RYAN.

English

S 2. *English Rhetoric.*—A study of self-expression through language covering the entire text of English Rhetoric. Daily 5–7. Two credits. Professor WILBUR.

S II. *English Composition.*—Practice in self-expression; correction of common errors; facility in writing; methods of research. Theme work, class discussion, and lectures. Daily at 8. One credit. Miss BRIGHAM.

NOTE. The completion of courses S 2 and S II together will be accepted in full satisfaction of the curriculum requirement in Freshman English.

S XXV. *Shakespeare.* The English Historical Plays.—The following plays: King John, King Richard II, King Henry IV, pts. 1, 2, King Henry V, King Henry VI, pts. 1, 2, 3. King Richard III, King Henry VIII. Daily at 8. One credit. Professor WILBUR.

French

See Romance Languages

Geology

*S 1a. *Mineralogy.*—Crystallographic, descriptive, and determinative mineralogy. This course is designed with especial reference to minerals as rock constituents or segregated as ore deposits. It includes, therefore, a discussion not merely of the crystallographic and theoretical, but of the practical side of the subjects as well. Whenever possible, it should be considered as introductory to the courses in either systematic or economic geology. Daily at 6. One credit. Professor BASSLER and Mr. RESSER.

*S 3. *Principles of Geography.*—This course considers the phenomena of the earth as a whole, the interrelations of these phenomena and their influence upon human affairs. It includes a study of the general geographical principles, including those of physiography and climate, and their application. Daily at 5. One credit. Mr. RESSER.

Classical Languages

*S A II. *Xenophon's Anabasis.*—This course, which is designed primarily to supplement Greek A, described in the general catalogue, is intended to complete the amount of the Anabasis specified in the entrance requirement, together with a review of the grammar. It presupposes such knowledge of elementary Greek as would be gained by one year of college work or a year and a half of high school work. Daily at 11. One credit. Professor SMITH.

German

S 2a. *Elementary German.*—The essentials of the grammar; exercises and dictation; simple conversation.

This course is the equivalent of the first semester's work in elementary German in the University. Text-book: Thomas's German grammar. Daily at 6. One and one-half credits. Professor SCHMIDT.

S 2b. A continuation course in Elementary German extending beyond the session of the Summer School and covering the work of the second semester in the University will be given if the demand justifies.

Text-books: Hewett's German reader. Pope's German prose composition. One and one-half credits. Professor SCHMIDT.

S 4a. *Second-Year German.*—The translation and interpretation of a classic, with special emphasis on syntax, the forces of prefixes and suffixes, and the relationship of German and English.

This course is the equivalent of the work done in the first semester in the University. Text-books: Schiller's Wilhelm Tell. Thomas's Practical German grammar. Daily at 5. One and one-half credits. Professor SCHMIDT.

S 4b. A continuation course extending beyond the session of the Summer School will be offered either in Scientific German or in Conversation and advanced composition, as those who apply may prefer. Text-books: Wait's German science reader. Pope's German prose composition. Bacon's Im Vaterland. One and one-half credits. Professor SCHMIDT.

S 5a. *Third-Year German.*—Advanced review course in German grammar: translation of English prose into German; selected advanced prose; one classic (Iphigenie or Braut von Messina); scientific German. This course is the equivalent of the first semester's work in German 5. Daily at 11. One and one-half credits. Professor SCHOENFELD.

Greek

See Classical Languages

History

S 20a. *American History.*—A study of the development of American nationality from the adoption of the constitution through the first half of the nineteenth century. Text-book, lectures, and reports. Daily at 4. One and one-half credits. Assistant Professor ALDEN.

Mathematics

S 4a. *College Algebra.*—Bowser's College Algebra. Ratio and proportion. Chapter XVI to the end of the book. Daily at 5. One and one-half credits. Mr. HODGKINS.

S 4b. *Plane Trigonometry.*—Crocket's Trigonometry. All of plane trigonometry. Daily at 6. One credit. Mr. HODGKINS.

NOTE. These courses will be duplicated respectively at 9 and at 10 by Professor Hodgkins if the demand justifies.

Philosophy and Psychology

S 1. *General Psychology.*—An introductory study of the principal facts and laws of the mental life. Daily at 9. One credit. Professor RUEDIGER.

S 3. *Logic.*—The principles of deductive and inductive inference. Daily at 10. One credit. Professor RICHARDSON.

S XXIII. *Introduction to Philosophy.*—A course, designed for beginners in philosophy, dealing with the nature of philosophy, the principles underlying it, and the principal theories that have arisen in the development of philosophic thought. This course is intended to give a general survey of the subject and to lead to more advanced work. Daily at 9. One credit. Professor RICHARDSON.

Physics

*S 3a. *Introductory General Physics.*—A lecture and recitation course planned with reference to the needs of the general student. Equivalent to the first semester's work of Course 3 described in the general catalogue. Daily at 6. One and one-half credits.

Physiology

S XXV. *Physiology.* The course will consist of lectures, demonstrations, and class discussions. Special reference will be made to human physiology, the topics dealt with including general physiology of cells, the nervous system, special sense organs, blood, heart and circulation, respiration, animal heat, digestion, and secretion. Daily 5–7. Two credits. Professors FRANZ, STOUT and COLLINS.

Political Science

S 21. *American Government.*—A study of the form of our national government and of its actual workings, with some consideration of present day tendencies. Text-book, lectures, and reports. Daily at 5. One credit. Assistant Professor ALDEN.

Romance Languages

French

S 2a. *First-Year Course:*—Fraser and Squair's French Grammar. Grammar (thirty-two lessons), drill in pronunciation, composition,

reading and translation of one hundred pages of modern French prose. For beginners. Daily at 5. One and one-half credits. Mr. CULLOM.

S 4a. *Second-Year Course.* Fraser and Squair's Franch Grammar (forty lessons, Part II); two hundred and fifty pages of modern French prose. First text, Sandeau, Mlle. de la Seiglière (Holt); other texts to be announced. Open to students who have received credit for one year of French, or have fulfilled the admission requirements in Elementary French. Daily at 6. One and one-half credits. Mr. CULLOM.

NOTE. These courses will cover the ground of the first semester respectively of first-year and of second-year French given during the regular session of the University.

*S 7. *French Conversation and Composition.* The work of the course will be divided between reading, conversation, composition, and writing from dictation. Open to students who have had elementary French. Daily at 4. One credit. Mr. MAILLET.

Spanish

S 1a. *First-Year Course.*—Essentials of Spanish grammar and composition based principally upon the first 24 lessons of Hills and Ford's Spanish Grammar. Reading of about 150 pages of short stories, etc. Text: Hills' Spanish Tales for Beginners. Daily at 5. One and one-half credits. Mr. JOHN.

S 2a. *Second-Year Course.*—Review of grammar; composition as based on Crawford's Spanish Composition. Reading of four or five hundred pages of modern prose, drama, etc. Prerequisite: One year of college Spanish or its equivalent. Daily at 6. One and one-half credits. Mr. JOHN.

NOTE: These courses will cover the ground of the first semester respectively of first-year and of second-year Spanish. Courses S 1b and S 2b, extending beyond the session of the Summer School and covering the second semester's work in the above courses, will be given if the demand justifies.

MEDICAL SCHOOL—SUMMER SESSION

The courses given below will cover the same ground and will be given in a similar manner to those that are given during the regular winter semesters.

These courses are primarily outlined to meet the needs of Medical Students.

The hours given below referring to the time of day for which any particular course is scheduled, are tentative, and may be changed to suit the majority of the class, provided the hours chosen are between 8 a.m. and 6 p.m.

Special arrangements may be made for Dental, Veterinary, and Special Students, should a sufficient number apply.

A course will not be given where the number of applicants is less than six.

Students taking these courses during the summer and entering the school in any regular course in the fall, will be allowed one-half of the summer tuition price in part payment for their regular tuition.

Histology and Embryology

Course begins June 12, and ends August 12, 1916.
Periods per week, Six (6).
Hours per period up to 7/29/16, Four (4) 2 to 6 p.m.
Hours per period from 7/31/16, Five (5), 1 to 6 p.m.

Tuition for combined course	$60.00	
Microscope fee	5.00	$65.00
Tuition for Histology only	$40.00	
Microscope	5.00	$45.00
Tuition for Embryology only	$17.50	
Microscope	2.50	$20.00

In Histology instruction is given in the care and use of the microscope and in the preparation of tissues (fixing, blocking, cutting, staining, etc.) for microscopical examination, and a systematic study is made of the minute structure of the tissues and organs of the body, the laboratory work being supplemented by lectures, recitations and stereopticon demonstrations.

The course in Embryology is devoted to the study of marine material, showing maturation, impregnation, segmentation, etc., and to series of chick and mammalian embryos, special stress being laid upon the development of the foetal membranes and organs. Lectures, recitations and demonstrations with laboratory models are also given.

Bacteriology

Course begins June 12, and ends August 5, 1916.
Periods per week, Five (5).
Hours per period, Four (4). Time 8–12 a.m.

Tuition	$50.00	
Microscope	5.00	$55.00

The laboratory portion of this course consists, in the first place, of instruction of the whole class in the manufacture of culture media, all the standard, and many of the special media, being prepared by the class in groups, as their practical needs require. In this connection and at later periods throughout the course, the particulars of sterilization and disinfection are thoroughly covered. The systematic portion of the course in the laboratory consists in the detailed study by culture, by the microscope, and by biological methods, of some forty different micro-organisms mostly of the pathogenic group. During the course, where occasion arises in connection with special cases of interest in the hospital, or elsewhere at our command, a number of unusual infections or rarely occurring processes of diagnosis, etc., are demonstrated.

In connection with the experience given in microscopic preparation, staining, etc., a thorough discipline in the use of the compound microscope as applied in the high powers is afforded, together with a review of the necessary theories of microscopic optics.

Infection and Immunity.—This important portion of the subject which may be considered as the theoretical side of Bacteriology in its relation to Pathology, is dealt with systematically throughout the year in a series of lectures, once a week or more frequently.

All the known methods of attack on the animal body by bacteria, and all the theories as well as facts of the defence of the animal body against this attack are dealt with both in historical and logical sequence. The so-called "schools" (of von Metchnikoff, Bordet, and Ehrlich) are considered in parallel with the history of the subject.

Not only by lectures but by demonstrations as well, such features of practical immunology as the agglutination reaction, lysis, and phagocytosis are demonstrated and inquired into by the students themselves. During the year, demonstration of the practical diagnostic work in the laboratory, covers the whole field of Wassermann and complement fixation technic.

Clinical Microscopy

Course begins June 19, and ends August 5, 1916.
Periods per week, Three (3). Tues. Thurs. and Sat.
Hours per period, Three (3). Time 9 –12 a.m.

Tuition	$10.00	
Microscope	5.00	$15.00

This course comprises the study and examination of various tissues, fluids, and material from the standpoint of diagnosis.

NOTE. See Clinical Chemistry.

Chemistry

1. *Inorganic Review.*—A series of recitations, in which the subject is reviewed and its relation to medicine emphasized.

June 19 to July 29, 1916.
Periods per week, Six (6).
Hours per period, One (1). Time, 11 a.m.
Tuition..... $10.00

2. *Qualitative Analysis.*—An abridged course, with stress upon its application in medicine.

June 19 to July 29, 1916.
Periods per week, Six (6).
Hours per period, Five (5). Time 9 to 12 a.m., and 1 to 3 p.m.
Tuition..... $30.00

3. *Organic Chemistry.*—A series of lectures, laboratory work, and recitations on the acyclic and cyclic hydrocarbons and their derivatives, with special reference to physiology and medicine.

June 19 to July 29, 1916.
Lectures and quizzes:
Periods per week, Six (6).
Hours per period, Two (2). 9 a.m.
Tuition..... $20.00
Laboratory:
Periods per week, Three (3).
Mon., Wed., Fri., at 11 a.m. Three (3) hours.
Tuition..... $15.00

4. *Physiological Chemistry.*—A series of lectures, laboratory work, and recitations on the proximate principles of the human body.

June 19 to July 29, 1916.
Periods per week, Six (6).
Hours per period, Three (3). Time 1 p.m.
Tuition..... $30.00

5. *Clinical Chemistry.*—A thorough course is given in which material from the University Hospital and Dispensary is utilized to show the practical application of this subject in medicine.

June 19 to July 29, 1916.
Periods per week, Three (3).
Mon., Wed., Fri., at 1 p.m.
Tuition..... $15.00

Metallurgy

This course consists of recitations and laboratory work on the occurrence, methods of isolation, properties and uses of metals of value in dentistry.

Demonstrations are given in the use and care of furnaces, including the construction of an electric furnace and the winding of a muffle therefor. Students prepare several alloys and amalgams, and isolate silver and gold from alloy scraps.

The course will be given in twenty-five periods of three hours each at such time as may be agreed upon with the class.

Primarily for dental students.

Tuition..... $25.00

Dental Pathology

A course in this subject will be given provided that not less than ten (10) applicants register therefor. This course will cover the general pathology of inflammation, degenerations, of the healing of wounds, of new growths, etc.; and the special pathology of organs and of special diseases, particular stress being given to those peculiar to the mouth and gastro-intestinal tract.

Tuition.....	$30.00	
Microscope.....	5.00	$35.00

In all laboratory courses a deposit of $10.00 to cover breakage is required.

LAW SCHOOL—SUMMER SESSION

The George Washington University Law School will hold a session of six weeks during the summer of 1916. Lectures will begin on June 26 and close August 4. Examinations will be held immediately thereafter.

Terms of Admission

The regular entrance requirements of the school will not be enforced for the summer session, but candidates will be permitted to register only for subjects for which they show adequate preparation.

(Admission to the summer session is special and does not waive the requirements for admission for the regular session. These must be satisfied as outlined in the announcement for 1916–17, and the matriculation fee will be payable on general admission.)

Fees

Tuition fees will be at the same rate as for the regular session, i.e., ten dollars for each subject except Conflict of Laws which will be twenty dollars. No matriculation or library fee will be charged, but tuition fees are payable in advance.

Courses of Instruction

Subjects have been selected to afford proper introductory work for students beginning the study of law, and supplementary work for advanced students.

The schedule is so arranged that one subject may be taken in the morning from 7.50–8.40 a.m., a second from 4.50–5.40 p.m., and a third from 5.40–6.30 p.m. Unemployed students may take all three periods, aggregating 15 hours a week. Employed students will be restricted to two periods, aggregating ten hours a week. Classes are held in each subject from Monday to Friday inclusive.

First Year Subjects

Personal Property.—Distinction between personal and real property; nature of and rights based upon possession; some methods of acquiring title to chattels; liens and pledges; conversion. Warren's Cases on Personal Property, 7.50–8.40 a.m. Mr. VAN VLECK.

Principles of Legal Liability.—Nature of an act; causation of injury; proximity or remoteness of injury as affecting tort or criminal liability of the actor; effect of interposition of other causes including natural forces and acts of animals and human beings; excuses for acts causing injury including duty, public authority, defence of person and property

and consent of injured person. Beale's Cases on Legal Liability, 4.50–5.40 p.m. Mr. CRANE.

Torts I.—Negligence; standard of care; legal and moral duties; duty of occupant of land toward trespassers, licensees, business and social visitors; trespass:—battery; assault; false imprisonment; trespass to real and personal property; trespass ab initio. Ames and Smith's Cases on Torts Vol. I, 3d Ed., Vol. II, 2d Ed., 5.40–6.30 p.m. Mr. KING.

Advanced Subjects

Insurance.—Marine, fire and life insurance; validity of the policy as affected by insurable interest; concealment; representation; warranty and other matters; rights of the insured and of the insurer under the policy; rights of assignees and beneficiaries. Wambaugh's Cases on Insurance, 7.50–8.40 a.m. Mr. CRANE.

Damages.—The functions of the court and jury in estimating damages; direct and consequential damages; damages for non-pecuniary injuries; rules controlling the estimate of damages in the various actions in tort and contract; damages in condemnation proceedings. Beale's Cases on Damages, 4.50–5.40 p.m. Mr. PARKS.

Mortgages.—A study of the law of mortgages as it exists today in the United States and in England. The course aims to present the two existing theories as to mortgage security. It deals with both real estate and chattel mortgages, considering in detail the various forms of mortgages commonly in use in commercial communities together with the rights and liabilities arising thereunder. Kirchwey's Cases on the Law of Mortgage, 5.40–6.30 p.m. Mr. PARKS.

Suretyship.—Nature of the contract; kinds of suretyship; the statute of frauds; surety's defenses based on the absence, suspension or discharge of the primary obligation, or on conduct of the creditor prejudicial to the surety-rights; effect of notice of revocation by or death of the surety; subrogation; exoneration. Ames' Cases on Suretyship, 7.50–8.40 a.m. Mr. KING.

Conflict of Laws.—(1) Jurisdiction; (a) of law over persons and things; (b) of courts, in rem, in personam, quasi in rem, and for divorce; (2) Creation and enforcement of foreign rights; (a) limitations upon enforcement of such rights; (b) remedies, including rights of action and procedure; (c) particular classes of rights, including personal rights, property rights, tort rights, contract rights; (d) administration of estates. Lorenzen's Cases on Conflict of Laws, 4.50–6.30 p.m. Mr. SCHREIBER.

Credit

Students who are qualified for admission as candidates for degrees, will be given two semester hours credit for each topic completed. (Conflict of Laws four semester hours) towards the degree.

Other students will be given a certificate when they request it.

MEDICAL SCHOOL

FACULTY

CHARLES HERBERT STOCKTON, LL.D....PRESIDENT OF THE UNIVERSITY
WILLIAM CLINE BORDEN, M.D.....Dean, and Professor of Surgery
J. FORD THOMPSON, M.D.....Professor of Surgery, Emeritus
GEORGE NICHOLAS ACKER, A.M., M.D.,
Professor of Pediatrics and Clinical Professor of Medicine
HENRY CRÈCY YARROW, M.D.....Professor of Dermatology, Emeritus
DANIEL KERFOOT SHUTE, A.B., M.D.,
Clinical Professor of Ophthalmology
STERLING RUFFIN, M.D.....Professor of Medicine
CHARLES EDWARD MUNROE, Ph.D., LL.D.....Professor of Chemistry
CHARLES WILLIAMSON RICHARDSON, M.D.,
Professor of Laryngology, Rhinology, and Otology
JOHN WESLEY BOVÈE, M.D.....Professor of Gynecology
THOMAS ASH CLAYTOR, M.D.....Clinical Professor of Medicine
AURELIUS RIVES SHANDS, M.D.....Professor of Orthopedic Surgery
RANDOLPH BRYAN CARMICHAEL, M.D.....Professor of Dermatology
FRANCIS RANDALL HAGNER, M.D.,
Professor of Genito-Urinary Surgery and Venereal Diseases
WILLIAM CREIGHTON WOODWARD, LL.M., M.D.,
Professor of Medical Jurisprudence
ALBERT LIVINGSTON STAVELY, M.D...Clinical Professor of Gynecology
WILLIAM ALANSON WHITE, M.D.,
Professor of Psychiatry and Clinical Professor of Neurology
SHEPHERD IVORY FRANZ, Ph.D., LL.D., M.D..Professor of Physiology
WILLIAM KENNEDY BUTLER, M.D.....Professor of Ophthalmology
BUCKNER MAGILL RANDOLPH, M.D.,
Professor of Materia Medica and Therapeutics
LUTHER HALSEY REICHELDERFER, M.D., Clinical Professor of Surgery
JAMES DUDLEY MORGAN, A.B., M.D.,
Clinical and Associate Professor of Medicine
LOUIS ANATOLE LAGARDE, M.D.....Professor of Military Surgery
GIDEON BROWN MILLER, S.B., M.D...Clinical Professor of Gynecology
OSCAR BENWOOD HUNTER, M.D., Professor of Histology and Embryology
and Associate Professor of Anatomy
WILLIAM SINCLAIR BOWEN, M.D.....Clinical Professor of Obstetrics
OSCAR ADDISON MACK MCKIMMIE, M.D.,
Clinical Professor of Laryngology and Otology
LOUIS MACKALL, M.D.....Clinical Professor of Medicine
CARL LAWRENCE DAVIS, M.D.....Professor of Anatomy
EDWARD RHODES STITT, A.B., M.D.....Professor of Tropical Medicine

FRANK LEECH, M.D.....Clinical Professor of Medicine
WILLIAM PHILLIPS CARR, M.D.....Clinical Professor of Surgery
HURON WILLIS LAWSON, S.M., M.D.....Professor of Obstetrics
FRANK ADELBERT HORNADAY, S.B., M.D.,
Professor of Physiological Chemistry
JOSEPH DUERSON STOUT, Ph.D., M.D.....Professor of Pharmacology
and Associate Professor of Physiology
THOMAS CHARLES MARTIN, M.D.....Professor of Proctology
MARCUS WARD LYON, JR., Ph.D., M.D.,
Professor of Bacteriology and Pathology
ERNEST FROTHINGHAM KING, M.D.,
Clinical Professor of Genito-Urinary Surgery
EDWARD LYMAN MUNSON, A.M., M.D.,
Professor of Preventive Medicine
HARRY HYLAND KERR, M.D.....Clinical Professor of Surgery
WILLIAM PINKNEY REEVES, M.D.....Clinical Professor of Surgery
EDGAR SNOWDEN, M.D.,
Professor of Hygiene and Clinical Instructor in Medicine
JOHN RYDER WELLINGTON, M.D.....Clinical Professor of Surgery
NOBLE PRICE BARNES, M.D.,
Associate Professor of Materia Medica and Therapeutics
CHARLES STANLEY WHITE, M.D.....Associate Professor of Surgery
DANIEL WEBSTER PRENTISS, S.B., M.D...Clinical Associate in Surgery
JOHN BENJAMIN NICHOLS, M.D.... Associate in Medicine and Dietetics
EDGAR PASQUAL COPELAND, M.D.....Associate in Pediatrics
HARRY HAMPTON DONNALLY, A.M., M.D., Clinical Associate in Pediatrics
HENRY RANDALL ELLIOTT, M.D.....Associate in Physiology
J. LEWIS RIGGLES, M.D.....Associate in Gynecology
WILLIAM CABELL MOORE, M.D.....Associate in Medicine
CHARLES AUGUSTUS SIMPSON, M.D., Clinical Associate in Dermatology
COURSEN BAXTER CONKLIN, M.D.....Associate in Medicine
EDWARD GRANT SEIBERT, M.D.,
Clinical Instructor in Laryngology and Ophthalmology
WALTER ASHBY FRANKLAND, M.D.....Clinical Instructor in Medicine
WALTER HIBBARD MERRILL, M.D.,
Instructor in Electro-Therapeutics and Roentgenology
TRUMAN ABBE, M.D.....Clinical Instructor in Surgery
JOHN POTTS FILLEBROWN, M.D.....Clinical Instructor in Surgery
VIRGIL B. JACKSON, M.D.....Clinical Instructor in Gynecology
EDMUND THOMAS MURDAUGH FRANKLIN, M.D.,
Clinical Instructor in Surgery
WILLIAM J. FRENCH, M.D.....Instructor in Materia Medica
CHARLES WILBUR HYDE, M.D.,Instructor in Medicine and Anaesthesia
ADAM KEMBLE, M.D., Clinical Instructor in Genito-Urinary Surgery
HOMER GIFFORD FULLER, M.D.,
Clinical Instructor in Genito-Urinary Surgery and Venereal Diseases
CLINE N. CHIPMAN, M.D.....Instructor in Anaesthesia

WILLIAM JOHNSTON MALLORY, A.M., M.D.....Instructor in Medicine
ALBERT PERKINS TIBBETS, M.D....Clinical Instructor in Laryngology
ELIJAH WHITE TITUS, Phar.D., M.D.....Instructor in Obstetrics
DANIEL LE RAY BORDEN, M.D.,
Instructor in Surgery and Clinical Instructor in Gynecology
ALBERT ELWOOD PAGAN, M.D.,
Instructor in Gynecology and Obstetrics
WILLIAM HENRY HUNTINGTON, M.D.,
Clinical Instructor in Laryngology and Otology
J. IRVING SLOAT, M.D.....Instructor in Surgery
JANVIER WHITTON LINDSAY, A.B., M.D.,
Instructor in Physical Diagnosis
BERNARD GLUECK, M.D.....Instructor in Psychiatry
HARRY SAMUEL LEWIS, M.D.....Clinical Instructor in Surgery
DWIGHT GORDON SMITH, M.D.....Clinical Instructor in Medicine
JOHN HUNTER SELBY, M.D.....Instructor in Radiography
ROBERT SAMUEL TRIMBLE, M.D .....Clinical Instructor in Medicine
WILLIAM BROWNE CARR, M.D.....Instructor in Morbid Anatomy
HARRY A. BISHOP, M.D.....Clinical Instructor in Neurology
OLIVER CLEMENCE COX, M.D.....Instructor in Minor Surgery
WILLIAM BERRY MARBURY, M.D.....Instructor in Surgery
SACKS BRICKER, M.D.....Clinical Instructor in Obstetrics
SAMUEL HARRISON GREENE, M.D.,
Clinical Instructor in Laryngology and Otology
WILLIAM HOUSTON LITTLEPAGE, M.D., Clinical Instructor in Medicine
JAMES ROBERT SCOTT, M.D...Instructor in Bacteriology and Pathology
LOUIS BERNARD CASTELL, M.D., Phar.D...Instructor in Pharmacology
JAMES CHARLES HASSALL, M.D.,
Instructor in Psychiatry and Clinical Neurology
EVERETT MONROE ELLISON, A.M., M.D....Instructor in Pharmacology
JAMES HAROLD COLLINS, A.B., M.D.....Instructor in Pharmacology
J. WARD MANKIN, M.D.....Instructor in Pharmacology
WILLIAM DAVID TEWKSBURY, M.D.....Clinical Instructor in Medicine
JOSEPH DECATUR ROGERS, M.D.....Clinical Instructor in Surgery
JOSIAH BAKER HENNEBERGER, M.D...Clinical Instructor in Obstetrics

THE STAFF OF THE GEORGE WASHINGTON UNIVERSITY HOSPITAL AND DISPENSARY

HOSPITAL

STERLING RUFFIN, M.D.....Physician-in-Chief
GEORGE NICHOLAS ACKER, M.D.,
Pediatrician-in-Chief and Associate Physician
BUCKNER MAGILL RANDOLPH, M.D.....Associate Physician
COURSEN BAXTER CONKLIN, M.D.....Associate Physician
WILLIAM CLINE BORDEN, M.D.....Surgeon-in-Chief

CHARLES STANLEY WHITE, M.D.....Associate Surgeon
AURELIUS RIVES SHANDS, M.D.....Orthopedic Surgeon
FRANCIS RANDALL HAGNER, M.D..... Genito-Urinary Surgeon
HOMER GIFFORD FULLER, M.D.....Associate Genito-Urinary Surgeon
JOHN WESLEY BOVÈE, M.D.....Gynecologist-in-Chief
GIDEON BROWN MILLER, S.B.,M.D.....Associate Gynecologist
HURON WILLIS LAWSON, M.D.....Obstetrician-in-Chief
ELIJAH WHITE TITUS, M.D.....Assistant Obstetrician
EDGAR PASQUAL COPELAND, M.D.....Associate Pediatrician
HENRY CRÈCY YARROW, M.D.....Dermatologist-in-Chief
RANDOLPH BRYAN CARMICHAEL, M.D.....Associate Dermatologist
CHARLES WILLIAMSON RICHARDSON, M.D.....Laryngologist
DANIEL KERFOOT SHUTE, M.D.....Ophthalmologist
WILLIAM KENNEDY BUTLER, M.D.....Ophthalmologist
EDWARD GRANT SEIBERT, M.D.,
Associate Laryngologist and Ophthalmologist
WALTER HIBBARD MERRILL, M.D.....Radiographer
OSCAR BENWOOD HUNTER, M.D.....Pathologist
FRANK ADELBERT HORNADAY, S.B., M.D.,
Director of the Clinical Laboratory
CHARLES WILBUR HYDE, M.D.....Anaesthetist
CLINE N. CHIPMAN, M.D.....Anaesthetist
PAUL STIRLING PUTZKI, M.D.....Resident Physician
ERIC STEELE GREEN, M.D.....Associate Resident Physician
CARROLL E. BINGMAN, M.D.....Associate Resident Physician
EDWARD RAYMOND HUNTER, M.D.....Associate Resident Physician
THOMAS CREASY BOST, M.D.....Associate Resident Physician
SIMON GERBER, Phar.D.....Pharmacist
MARY WINIFRED GLASCOCK, R.N.....Superintendent of Nurses and
Principal of the Training School for Nurses
JOHN BRUCE COPPING.....Superintendent of the Hospital

DISPENSARY

STERLING RUFFIN, M.D.....Physician-in-Chief
JOHN WESLEY BOVÈE, M.D.....Gynecologist-in-Chief
WILLIAM CLINE BORDEN, M.D.....Surgeon-in-Chief
HURON WILLIS LAWSON, A.M., M.D.....Obstetrician-in-Chief
J. IRVING SLOAT, M.D.....Director of the Dispensary

General Medicine

BUCKNER MAGILL RANDOLPH, M.D.....Attending Physician
WILLIAM CABELL MOORE, M.D.....Attending Physician
WILLIAM JOHNSTON MALLORY, M.D.....Attending Physician
ROBERT S. TRIMBLE, M.D.....Attending Physician
ALBERT ELWOOD PAGAN, M.D.....Attending Physician
WALTER ASHBY FRANKLAND, M.D.....Attending Physician

General Surgery

TRUMAN ABBE, M.D. ..... Attending Surgeon
EDMUND THOMAS MURDAUGH FRANKLIN, M.D. ..... Attending Surgeon
JOHN POTTS FILLEBROWN, M.D. ..... Attending Surgeon

Genito-Urinary Diseases

FRANCIS RANDALL HAGNER, M.D. ..... Genito-Urinary Surgeon
HOMER GIFFORD FULLER, M.D. ..... Attending Surgeon
ADAM KEMBLE, M.D. ..... Attending Surgeon
J. IRVING SLOAT, M.D ..... Attending Surgeon

Gynecology

DANIEL LERAY BORDEN, M.D. ..... Attending Gynecologist
ALBERT ELWOOD PAGAN, M.D. ..... Attending Gynecologist

Obstetrics

HURON WILLIS LAWSON, M.D. ..... Obstetrician-in-Chief
ELIJAH WHITE TITUS, M.D. ..... Assistant Obstetrician

Eye, Ear, Throat, and Nose

EDWARD GRANT SEIBERT, M.D. ..... Laryngologist and Ophthalmologist
ALBERT PERKINS TIBBETS, M.D.,
Assistant Laryngologist and Otologist

Neurology

HARRY A. BISHOP, M.D. ..... Neurologist

Radiography

WALTER HIBBARD MERRILL, M.D.,
Electro-Therapeutist and Radiographer
JOHN HUNTER SELBY, M.D. ..... Radiographer

Dermatology

CHARLES AUGUSTUS SIMPSON, M.D. ..... Attending Dermatologist

Pathology

OSCAR BENWOOD HUNTER, M.D. ..... Pathologist

Laboratory

FRANK ADELBERT HORNADAY, M.D. ..... Director

Medical Building

HENRY KNOX CRAIG, M.D. ..... Librarian and Curator of the Museum
ROBERT MAURER, A.B., LL.M.,
Official Evaluator for Premedical Education
PATRICK PERCY VANE ..... Superintendent of the Building
ANNA ELIZABETH SELLNER ..... Secretary to the Dean

HISTORICAL

The *Medical School of the George Washington University*, in the chronological order of establishment, is the seventeenth Medical School in the United States. The first course of lectures began in March, 1825. For many years the school was known as the National Medical College; subsequently as the Department of Medicine of the Columbian University. By virtue of an act of Congress approved January 23, 1904, the Columbian University changed its name to "The George Washington University."

When first established, and for many years thereafter, this school, like most others in this country, gave only a two years' course of five months each. In 1878 the course was lengthened by the establishment of a Spring Session devoted to lectures in certain special subjects. In 1879 the course was lengthened to seven months and attendance upon three annual sessions required, and in 1893 attendance on four annual courses was made obligatory upon all candidates for the degree of Doctor of Medicine. In order to increase the facilities for actual bedside teaching, the University Hospital and the University Dispensary were established in 1898 and made a part of the Medical School. In 1902 the old Medical School building, in which the exercises had been held since 1867, gave place to the present large and commodious structure.

EDUCATIONAL POSITION

The Medical School of the University has been for several years a member of the Association of American Medical Colleges. It is one of Medical Colleges designated as "class A," by the American Medical Association, and it is accredited for all its work by the Combined (Royal) Medical Examining Boards in England.

The degree of M.D. given by the University is recognized as evidence of adequate medical education by every medical examining board in the United States and with credentials of required preliminary education, will admit the holder of the degree to any state or governmental examination.

These facts guarantee the character of the work done by the School and insure its students and graduates all the advantages which accrue from such association and recognition.

BUILDINGS AND OTHER FACILITIES

Buildings of the Medical Department

All the buildings adjoin each other and consist of the Medical School Building and the University Hospital and the University Dispensary. They are most advantageously situated in the heart of the city within one block of both systems of car lines. As the Hospital and Dispensary adjoin the School, their clinical facilities are easily accessible to the students, and the pathological material and the material for clinical microscopy and clinical chemistry afforded by the Hospital and Dispensary are directly used in the School laboratories.

Medical School Building.—A modern commodious, five-story structure, with spacious, well-lighted, well-ventilated lecture and class rooms, laboratories, and students' rooms. It has an elevator service, and is equipped throughout with steam heat, gas, electricity, and all modern improvements.

Laboratories.—Six in number (for anatomy, chemistry, physiological and clinical chemistry, histology and embryology, physiology and pharmacology, and bacteriology and pathology) are fully equipped with the most approved appliances, so that students may adequately pursue the laboratory courses and acquire the technical skill necessary in modern clinical and research methods.

University Medical Library.—Open for study and consultation from 9 a.m. to 9 p.m. with a Librarian who is a graduate of Medicine in charge. It contains at present more than 2,000 volumes, and provision is made to add to it as published the important new works on medicine. The most important medical periodicals are regularly received. The Library is an excellent working collection, as it affords opportunity to read up adequately on the subjects presented in the courses.

Pathological Museum.—Contains a great many valuable and interesting specimens. Their number is increased by additions from time to time. These specimens are particularly valuable to the students as illustrating the changes produced by disease.

ADVANTAGES OF LOCATION

Advantages of Washington as a place for pursuing the study of medicine

This city now has nearly half a million inhabitants, providing abundant clinical material to the hospitals, which have an aggregate of about four thousand beds. In these hospitals clinical instruction, in addition to that in the University Hospital, is given by members of the Faculty.

The *great libraries* and *museums* connected with the various Government institutions afford unparalleled facilities for study.

The Library of the Surgeon General's Office of the United States Army is the most complete medical library in the world, and all leading medical periodicals of the world are subscribed for. All the facilities of this great library are open to *medical students*. There is also the Library of Congress, the Public Library, and the many excellent libraries of the various Government offices, all of which are open to students.

The *Army Medical Museum* affords an unrivaled opportunity for studying the conditions met with in military and general surgery. It contains on exhibition a collection of anatomical and pathological specimens unequalled by any other museum. Other Government museums are the Museum of Hygiene, in connection with the Medical Department of the Navy and the National Museum which contains the most complete and best arranged collection of materia medica in the world. The drugs are shown in all their processes of manufacture. The Botanic Gardens, the Smithsonian Institution, the Fish Commission, the De-

partment of Agriculture, all afford opportunities for study both in medicine and its collateral sciences.

On account of the many advantages offered in this city, the *Army and Navy Medical Schools* have been here located. The Alumni of this School are largely represented in all public services, and have been highly successful in passing the rigid examinations given by them. Ten per cent of the total number of the regular medical corps of the United States Army are graduates of this School.

Aside from the special advantages offered for the study of medicine, the cosmopolitan character of the city of Washington, its climate (not excessively cold in winter), its beauty, and its interests, which, as it is the seat of the General Government, are broad and national, make it an ideal place for a medical student to pass his four years of study.

ADMISSION

The requirements for admission to the Medical School for the session 1916–17 are as follows:

Candidates for matriculation must present creditable certificates of good moral character from two physicians in good standing.

The educational requirements for admission are:

A. The minimum requirement for admission is one year of college work, totaling not less than fifteen credits, including physics, chemistry and biology. It is strongly urged that the year's work also include three credits in a modern language other than English, preferably French or German. The college year must be preceded by fifteen units of secondary school work made up as follows:

Seven Required Units.—English (Reading and Practice), 2 units; Algebra to quadratics, 1 unit; Plane Geometry, 1 unit; German or French, or Latin or Greek, 2 units; History, 1 unit.

Eight Elective Units.—To be selected from the following: English, Mathematics, Latin, Greek, German, French, Spanish, Scandinavian, Science with laboratory work, Agriculture, Drawing, Manual Training, Domestic Science, Music, or other secondary school subjects.

B. A Bachelor's degree from an approved college or University, provided the holder of such degree presents satisfactory credentials covering one year's college work in chemistry, physics and biology; and provided, further, that the applicant may be admitted to the Medical School conditioned in physics or one-half the requirement in physics and one-half that in biology.

A unit is the credit value of 36 weeks' work of five recitation periods per week, each period to be not less than 40 minutes. A point is a subject pursued through one-half the above time. Two points may be considered the equivalent of one unit.

An examination is given by the University in the latter part of May and September of each year to students who are deficient in whole or

part of the subjects required for entrance to the Premedical Course. Candidates desiring examination must submit an application for the examination and submit certificates of character to the Dean before the first of the month in which they desire to be examined.

Certificates from reputable instructors recognized by the State Board of Medical Examiners duly authorized by law or by the Superintendent of public instruction in States having no examining board may be accepted in lieu of any part of the examination.

As the laws relating to the preliminary educational qualifications required of physicians differ in many of the States of the Union, candidates are advised to make themselves familiar with the provisions of the medical statutes of the States in which they contemplate applying for license to practice. Attention to this precaution may save future embarrassment.

PRELIMINARY (PREMEDICAL) YEAR

A preliminary year is offered by the University to meet the requirement of a year of College work necessary to enter the freshman class in Medicine. This year is given in Columbian College of the Department of Arts and Sciences. Students desiring to take this year will be admitted on the fifteen unit entrance requirement set forth on page 145 of this catalogue and will be required to pursue the full year's courses, both didactic and laboratory in Biology, Physics and Chemistry. There should be a total of not less than fifteen credits and it is strongly urged that those include three credits in a modern language other than English, preferably French or German.

COURSES AND DEGREES OFFERED BY THE UNIVERSITY IN ADDITION TO OR IN COMBINATION WITH THE COURSE FOR THE DEGREE OF DOCTOR OF MEDICINE

The states of Alabama, Colorado, Indiana, Iowa, Minnesota, New Hampshire, New Jersey, North Dakota, South Dakota and Wisconsin now require applicants for the practice of medicine to have two years of college work in addition to graduation in medicine.

To students who intend to practice in these states or who desire two years of college work before entering upon the study of medicine, the University offers a six-year combination course, by which a student may meet the requirements of these states and at the same time obtain the degree of Bachelor of Science in Medicine and Doctor of Medicine.

Admission to Columbian College

Applicants for admission to the Freshman Class in Columbian College for the combined courses leading to the degrees of Bachelor of Arts or Bachelor of Science in Medicine and Doctor of Medicine must meet the general admission requirements of fifteen units. A unit represents a year's study in any subject in a secondary school, constituting approximately a quarter of a full year's work. *The fifteen units of the entrance requirements must include English, 3 units; Mathematics, 2½ units, and*

one of the following languages: Latin, Greek, French, German, or Spanish. 2 units. The remainder of the requirement is elective and may be satisfied in general by any accredited secondary school subjects.

Six-year course for the Degree of Bachelor of Science in Medicine and Doctor of Medicine

Regular students enrolling for this course will complete two years of work aggregating at least thirty-six prescribed hours in Columbian College, and the four-year course in the Medical School. On the completion of this six-year course the student will receive at the same time the degree of Bachelor of Science in Medicine and Doctor of Medicine. The curriculum requirement for this combined six-year course is as follows:

a. Columbian College:

SUBJECT	HOURS
Biological Sciences:	
Zoology 1	3
Botany 1	3
Chemistry 1, 2, 23	7
English 1 or 2	3
German, French, or Spanish	6
History	3
Mathematics 3 or 6	3
Physics 3 and 2	5
Psychology and Logic	3
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b. Medical School:

The four-year course for the degree of Doctor of Medicine.

Seven-year course for the Degree of Bachelor of Arts and Doctor of Medicine

Regular students in this course will complete at least forty-eight hours, as prescribed in Columbian College, and the four-year course in the Medical School. On the completion of the prescribed forty-eight hours of work in Columbian College and the first year of the regular course in Medicine, the student will receive the degree of Bachelor of Arts.

The forty-eight hours of prescribed subjects in Columbian College are as follows:

Columbian College:

SUBJECT	HOURS
Biological Sciences:	
Zoology 1, 2	6
Botany 1	3
Chemistry 1, 2, 23	7
English 1 or 2	3
German	6

	HOURS
French or Spanish	6
History	3
Mathematics 3 or 6	3
Physics 3 and 2	5
Psychology and Logic	3
Economics, History, or English	3
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ADMISSION OF STUDENTS FROM OTHER SCHOOLS

Students who have attended one or more terms at any other medical college in good standing, and who have the necessary preliminary educational requirements, may be admitted to advanced standing upon passing the examination required of students for the stage at which they propose to enter, or upon presenting certificates of examination covering courses equal to those in this School.

Students who have been in attendance upon an Arts course in other accredited colleges or universities may be admitted to advanced standing in any of the premedical courses offered by the University upon examination or upon presentation of properly certified evidence of satisfactory completion of work for which credit is asked.

Students, approved by the Dean, not candidates for the degree of Doctor of Medicine, may be admitted as special students to any of the courses, provided they have the educational attainments which will enable them to pursue properly the studies they elect.

ACADEMIC YEAR

The *Academic Year* begins on the last Wednesday in September and ends on the Wednesday following the Wednesday nearest the first day of June. It is divided into two half-years of four months each.

The term of study for the degree of Doctor of Medicine consists of four years of thirty-two weeks each, exclusive of vacations and holidays. The next session, the ninety-fourth, begins September 27, 1916, and ends June 6, 1917.

Students must register promptly at the beginning of the session, in order that their time of study shall count as a full year.

SYSTEM OF INSTRUCTION

Instruction is carried on by laboratory work, lectures, recitations, bedside instruction, and hospital and dispensary clinics. Particular stress is laid upon laboratory work and clinical teaching. The clinical material of the University Hospital and Dispensary is utilized to the fullest extent, as the Hospital, the Dispensary, and the Medical School are under the same control. Additional clinics are given in other hospitals in the city to which members of the faculty are attached.

While the greatest stress is laid upon laboratory work and clinical teaching, it is recognized that the facts so obtained must be correlated

and shown in their due relation to each other and to the science of medicine. To this end didactic lectures are maintained in certain branches, as they have been found necessary to give a systematic and comprehensive idea of the larger subjects in medicine. These lectures are followed by systematic and thorough quizzes, so that it may be certain that the students properly and thoroughly grasp the ideas presented by the lecturers.

The recitation and quiz work is made so complete that students do not need to employ private quizmasters.

The object sought throughout the courses is to ground thoroughly the students in the knowledge which is necessary to a practitioner of medicine. No particular attempt is made to graduate specialists in any subject. It is believed that the four years allowed are no more than sufficient time for the adequate preparation of the general practitioner.

The policy adopted by the School is to give a comprehensive, well graded and well-proportioned course—one that will adequately prepare the graduate to practice general medicine and meet the requirements of State Boards.

ORDER OF INSTRUCTION

The subjects studied in each year are shown in the following table. Major subjects are in italics:

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
Anatomy.	*Anatomy.*	*Medicine.*	*Medicine.*
Histology.	*Physiological Chemistry.*	*Surgery.*	*Surgery.*
Embryology.	*Pathology.*	Fractures and Dislocations.	Orthopædics.
Physiology.	*Bacteriology.*	Clinical Microscopy.	Genito-Urinary Diseases.
Chemistry.	Materia Medica.	*Obstetrics.*	Operative Surgery.
	Pharmacology.	*Therapeutics.*	Gunshot Wounds.
	Minor Surgery.	Radiography.	*Obstetrics.*
	Physical Diagnosis.	Radiotherapy.	*Gynecology.*
	Pathological Physiology.	*Gynecology.*	Laryngology and Otology.
	Hygiene.	Medical Jurisprudence.	Ophthalmology
	Psychology.	Clinical Chemistry.	Dermatology.
		Dietetics.	Psychiatry.
		Tropical Medicine.	Pediatrics.
		Clinics.	Neurology.
			Clinics.

The *clinics* above listed comprise the medical, surgical, and other clinics given in the third and fourth years, and are as hereafter noted under the announcements of the different clinical subjects.

OUTLINE OF CURRICULUM

Hours of Required Work in Each Subject

(On the basis of 32 actual weeks in each year)

SUBJECTS	YEARS	HOURS Totals*† Didactic, Lab. and Clinical		HOURS Didactic not to exceed	
Anatomy	I	440		90	
Anatomy	II	210		30	
		—	650	—	120
Histology and Embryology	I	224		60	
		—	224	—	60
Chemistry	I	308		90	
Chemistry	II	100		30	
		—	408	—	120
Physiology	I	184		72	
Physiology	II	68		32	
		—	252	—	104
Psychology	II	32		32	
		—	32	—	32
Bacteriology	II	126		30	
Pathology	II	282		60	
		—	408	—	90
Hygiene	II	32		32	
		—	32	—	32
Dietetics	III	24		24	
		—	24	—	24
Pharmacology	II	140		28	
Materia medica	II	40		40	
Therapeutics	III	64		64	
Radiotherapy	III	8		8	
		—	252	—	140
Gynecology	III and IV	144		48	
		—	144	—	48
Obstetrics	III and IV	192		64	
		—	192	—	64

* The number of hours represents the amount of time *each* student devotes to the course. In addition to the hours scheduled in the third and fourth years, each student is required to do satisfactorily considerable practical work: he is assigned to cases in the University and Garfield Hospitals, is required to assist at operations, to attend cases of labor, administer anaesthetics, attend autopsies, and to take the history of cases. Fully 120 hours annually are required to do this unscheduled work.

† Subject to variation.

SUBJECTS	YEARS	HOURS (continued) Totals Didactic, Lab. and Clinical	Didactic not to exceed
Medicine	II, III, IV		
General Medicine		606	200
Clinical Microscopy		48	0
Physical Diagnosis		80	40
Tropical Diseases		12	12
Dermatology		48	12
Pediatrics		120	18
Neurology		64	24
Psychiatry		42	12
Medical Jurisprudence		30	30
Clinical Chemistry		48	12
		— 1098	— 360
Surgery	II, III, IV		
General Surgery		540	144
Minor Surgery		40	20
Radiography		16	0
Fractures, etc		16	16
Military Surgery		8	8
Ophthalmology		64	16
Otology and Laryngology		60	24
Genito-Urinary Surgery		48	16
Orthopedics		48	16
		— 840	— 260
Grand totals		4556	1454

ANATOMY

CARL LAWRENCE DAVIS, M.D. ..... Professor
OSCAR BENWOOD HUNTER, M.D. ..... Professor of Histology and Embryology and Associate Professor of Anatomy

The instruction in the various anatomical sciences—gross human anatomy, neurology, embryology and histology—is carried on by the Division of Anatomy of which the Professor of Anatomy is the head. This insures complete correlation of the various anatomical branches and adequate instruction in each.

During the first year the course in Gross Anatomy is given mainly by practical laboratory work.

The greater portion of the course is given during the first year thus enabling the student to apply his early knowledge of Anatomy to his other branches of study. Complete disarticulated skeletons are loaned to the students, so that they may familiarize themselves with the osteo-

logical features of the various parts during their dissection. Each student is required to dissect satisfactorily the lateral half of a cadaver. The dissecting room work is supplemented by demonstration, recitation and lectures, illustrated by lantern slides, models, diagrams and special dissections. The systematic study of the gross and minute anatomy of the central nervous system and organs of special sense is pursued by means of lectures, recitations, and laboratory work.

In the second year a course in applied anatomy is given, in which recitations and laboratory demonstrations, frozen sections and special dissections are used to familiarize the student thoroughly with the subject.

Throughout the course every opportunity is taken to emphasize the application of anatomy to the practice of medicine in all its departments.

		HOURS	
SUBJECT	YEARS	Totals Didactic and Lab.	Didactic not to exceed
Anatomy	I	440	90
Anatomy	II	210	30
		— 650	— 120

In Histology instruction is given in the care and use of the microscope and in the preparation of tissues (fixing, blocking, cutting, staining, etc.) for microscopical examination, and a systematic study is made of the minute structure of the tissues and organs of the body, the laboratory work being supplemented by lectures, recitations and stereopticon demonstrations.

The course in Embryology is devoted to the study of marine material, showing maturation, impregnation, segmentation, etc., and to series of chick and mammalian embryos, special stress being laid upon the development of the foetal membranes and organs. Lectures, recitations and demonstrations with laboratory models are also given.

		HOURS	
SUBJECT	YEAR	Totals Didactic and Lab.	Didactic not to exceed
Histology and Embryology	I	224	60
		— 224	— 60

PHYSIOLOGY

SHEPHERD IVORY FRANZ, Ph.D, L.L.D., M.D.....Professor
JOSEPH DUERSON STOUT, Ph.D., M.D.....Associate Professor
HENRY RANDALL ELLIOTT, M.D.....Associate

The course in physiology consists of lectures, recitations, demonstrations, laboratory exercises and conferences during the first and second years. It begins in the second-half of the first year, so that the

student is early in his course in medicine introduced to the functional viewpoint. The functions of the nervous system and special senses, of the blood, of the heart and circulatory system, of glands, of the digestive system, of the respiratory mechanisms, and of reproduction are considered by means of lectures and recitations, and, as far as possible, experimentally. In the laboratory each student performs the main experiments illustrating the facts regarding bodily function, and demonstration experiments are given of those functions which are too complex for the student to perform himself. In this laboratory work each student is required to keep records of his experiments, and each experiment is supervised and the record criticized and checked by one of the instructors before the student leaves the laboratory for the day. The class is divided into sections for oral recitations, which are supplemented by written recitations.

After the completion of the work in normal physiology in the second year, a series of laboratory exercises on the physiological action of drugs is given (see the announcement under Department of Pharmacology and Therapeutics), and in conjunction with that laboratory work lectures are given and recitations are held in which the functional disturbances in disease are considered. In this course special attention is given to the abnormalities of action of the heart and circulatory system, to the mechanical disturbances in respiration, and to the disturbances of the nervous system and the special senses. By this course it is intended to bring the course in normal physiology into closer relations with the succeeding courses in Pathology, Therapeutics and General Medicine.

The course in psychology aims to give, by lectures and conferences, the main facts regarding mental processes, and to develop the psychological aspect of medicine, upon which so much emphasis has recently been laid. The course is primarily medical in its treatment and thus deals with pathological as well as normal mental phenomena, but without encroaching upon the courses in Psychiatry and Neurology.

SUBJECT	YEARS	HOURS Totals Didactic and Lab.		HOURS Didactic not to exceed	
Physiology	I	184		72	
Physiology	II	68		32	
		—	252	—	104
Psychology		32		32	

CHEMISTRY

CHARLES EDWARD MUNROE, Ph.D., LL.D. ..... Professor
FRANK ADELBERT HORNADAY, S.B., M.D.
Professor of Physiological Chemistry

Inorganic Chemistry.—A series of recitations, in which the subject is reviewed and its relation to medicine emphasized.

Qualitative Analysis.—A laboratory course on methods of separating and identifying the commoner metallic elements and acid radicals and the application of such methods in medicine.

Organic Chemistry.—A series of lectures, laboratory work, and recitations on the acyclic and cyclic hydrocarbons and their derivatives, with special reference to physiology and medicine.

Physiological Chemistry.—A series of lectures, recitations and laboratory work on food stuffs, including carbohydrates, proteins and fats, their properties, reactions, digestion, absorption and assimilation. Careful consideration is given to enzymes and to the various secretions of the body.

Clinical Chemistry.—A thorough course is given in which material from the University Hospital and Dispensary is utilized to show the practical application of this subject in medicine.

SUBJECT	YEARS	HOURS Totals Didactic and Lab.		HOURS Didactic not to exceed	
Chemistry.....					
Inorganic Review Qualitative Analysis Organic	I	308		90	
Physiological.....	II	100		30	
		—	408	—	120
*Clinical Chemistry.....	III	48		12	

MATERIA MEDICA, PHARMACOLOGY AND THERAPEUTICS

BUCKNER MAGILL RANDOLPH, M.D.....Professor
JOSEPH DUERSON STOUT, Ph.D., M.D.....Professor of Pharmacology
NOBLE PRICE BARNES, M.D.....Associate Professor
WALTER HIBBARD MERRILL, M.D.....Instructor
WILLIAM J. FRENCH, M.D.....Instructor
LOUIS BERNARD CASTELL, M.D., Phar.D.....Instructor
EVERETT MONROE ELLISON, A.M., M.D.....Instructor
JAMES HAROLD COLLINS, A.B., M.D.....Instructor
J. WARD MANKIN, M.D.....Instructor

Second Year.—(1) Lectures upon Materia Medica, including a demonstration of drugs and their preparations. (2) Recitations upon the preparations, their doses, and the various antidotes for poisons. (3) Practical exercises in prescription writing. (4) Demonstrations of drugs. (5) Pharmacology. The course in Pharmacology is given in the second year, having two three-hour laboratory periods and a one-hour recita-

*See also announcement under Medicine.

tion period each week. During the laboratory exercises the students, divided into small groups under instructors, investigate the action of the most common drugs, including alcohol, ether, chloroform, digitalis, aconite, strychnine, etc., by actual experiment. They are taught what effects to expect from the use of a given drug and to observe the results as they occur. The number of drugs covered in this work is about seventy, including both inorganic and organic series.

Third Year.—(1) Systematic lectures and recitations on the physiological action of drugs and other remedial agents, as demonstrated by laboratory experiment and clinical application; their therapeutic use in disease; their modes of administration; and a review of their toxicology. (2) A review of the principles of prescription writing, with practical exercises by students in writing prescriptions in the metric and English systems. (3) Lectures in applied therapeutics, devoted to the study of the application of remedial measures to morbid physiological and pathological states, as they occur clinically. (4) Lectures and section demonstrations in electro-therapeutics and Roentgen therapy.

SUBJECT	YEARS	HOURS Totals Didactic and Lab.	Didactic not to exceed
Pharmacology	II	140	28
Materia Medica and Toxicology	II	40	40
Therapeutics	III	64	64
Radiotherapy	III	8	8
		— 252	— 140

DIETETICS

JOHN BENJAMIN NICHOLS, M.D.....Associate

A course of lectures on the physiology of nutrition and principles of feeding in health and disease.

SUBJECT	YEARS	HOURS Totals Didactic and Lab.	Didactic
Dietetics	III	24	24

PATHOLOGY AND BACTERIOLOGY

MARCUS WARD LYON, JR., M.D., Ph.D.....Professor
OSCAR BENWOOD HUNTER, M.D.....Professor of Histology
FRANK ADELBERT HORNADAY, S.B., M.D.,
Professor of Physiological Chemistry
WILLIAM BROWNE CARR, M.D.....Instructor in Morbid Anatomy
JAMES ROBERT SCOTT, A.B., M.D.....Instructor

BACTERIOLOGY

The didactic portion of the course in Bacteriology consists of a series of about thirty formal lectures in which the entire field of bacteriology including immunology in its application to human medicine and welfare is considered. The first few lectures are necessarily limited to the consideration of the general principles of the science after which the pathogenic microorganisms are discussed in a systematic sequence, with the theories of immunity treated of in appropriate places.

In the laboratory portion of the course which occupies about three-quarters of the total time devoted to the subject the students first prepare all the standard culture media and learn the general principles of bacteriologic technic from the study of about a dozen typical, widely different non-pathogenic organisms. Subsequently twenty-five to thirty pathogenic bacteria are carefully examined by microscopic, cultural and serologic methods. The students prepare as far as practicable such special media as are needed for this latter work. In addition to this systematic examination of characteristic organisms the students test the efficiency of the commonly employed germicides, prepare a vaccine, and in groups prepare agglutinating, hemolytic and other immune serums and use these as commonly employed in diagnosis. In connection with the preparation of culture media the principles of sterilization are covered. In the microscopic examination of bacteria the students are trained in the use of the high powers of the microscope, in the use of dark ground illumination, and are taught to make microscopic measurements.

During the course where occasion arises in connection with special cases of interest in the University Hospital or elsewhere unusual infections or rarely occurring processes of diagnosis, etc., are demonstrated. The routine bacteriologic and serologic work of the Hospital is done in the same laboratory where the students are working so that they have ample opportunity to observe the practical applications of bacteriology.

PATHOLOGY

In Pathology, the division of the course into laboratory and lecture teaching is followed, the amount of time devoted to each being about twice the corresponding time in Bacteriology. General pathology covering inflammation, repair, degenerations, the effects of plant (including bacteria) and animal parasites on the body, the effects of chemical and physical agents, the formation of new growths, etc., is first considered. This is followed by the special pathology of the organs and of the specific diseases.

The laboratory work consists primarily in the histologic study of diseased tissues and neoplasms. About two hundred sections are stained and mounted by each student and become his individual property. These sections are carefully examined and studied by the student who makes colored pencil drawings of the characteristic lesions shown by them.

The microscopic study is supplemented by that of post-mortem material and that from the operating room and by specimens in the museum thus affording a knowledge of gross morbid anatomy.

Varying in number with the extent of material afforded, students have the opportunity of training in the details of post-mortem technic from the autopsy through the preparation, sectioning, and staining of the tissues to be studied, to their final diagnosis and report.

CLINICAL MICROSCOPY

In the course in Clinical Microscopy the student is trained in the counting of the red and the white blood cells, in the various methods of hemoglobin estimation, in differential leucocyte counting, in the study of malaria parasites, and such other parasites of the blood as opportunity affords, in the estimation of the coagulation time of the blood, etc., in the microscopic study of the sediments in normal and pathologic urines, in the microscopic examination of stomach contents, of the feces, including a detailed study of animal parasites and their eggs, in the microscopic examination of sputum, of spinal fluids, pleural exudates, etc., as material and opportunities afford. The significance and value of these findings as applied to pathology and diagnosis are considered.

		HOURS	
		Totals Didactic and Lab.	Didactic not to exceed
SUBJECT	YEARS		
Bacteriology	II	126	30
Pathology	II	282	60
		— 408	— 90
*Clinical Microscopy		48	0

MEDICINE

STERLING RUFFIN, M.D. ..... Professor
GEORGE NICHOLAS ACKER, A.M., M.D.,
Professor of Pediatrics and Clinical Professor of Medicine
THOMAS ASH CLAYTOR, M.D. ..... Clinical Professor of Medicine
RANDOLPH BRYAN CARMICHAEL, M.D. ..... Professor of Dermatology
WILLIAM CREIGHTON WOODWARD, LL.M., M.D.,
Professor of Medical Jurisprudence
WILLIAM ALANSON WHITE, M.D.,
Professor of Psychiatry and Clinical Professor of Neurology
JAMES DUDLEY MORGAN, A.B., M.D.,
Clinical and Associate Professor of Medicine
LOUIS MACKALL, M.D. ..... Clinical Professor of Medicine
EDWARD RHODES STITT, A.B., M.D. ..... Professor of Tropical Medicine
EDGAR SNOWDEN, M.D.,
Professor of Hygiene, and Clinical Instructor in Medicine

*See also announcement under Medicine.

FRANK LEECH, M.D.....Clinical Professor of Medicine
JOHN BENJAMIN NICHOLS, M.D.....Associate in Medicine and Dietetics
EDGAR PASQUAL COPELAND, M.D.....Associate in Pediatrics
HARRY HAMPTON DONNALLY, A.M., M.D., Clinical Associate in Pediatrics
WILLIAM CABELL MOORE, M.D.....Associate in Medicine
CHARLES AUGUSTUS SIMPSON, M.D.....Associate in Dermatology
COURSEN BAXTER CONKLIN, M.D.....Associate in Medicine
WALTER ASHBY FRANKLAND, M.D.....Clinical Instructor in Medicine
CHARLES WILBUR HYDE, M.D..Instructor in Medicine and Anaesthesia
WILLIAM JOHNSTON MALLORY, M.D.....Instructor in Medicine
JANVIER WHITTON LINDSAY, A.B., M.D.,
Instructor in Physical Diagnosis
BERNARD GLUECK, M.D.....Instructor in Psychiatry
DWIGHT GORDON SMITH, M.D.....Clinical Instructor in Medicine
ROBERT SAMUEL TRIMBLE, M.D.....Clinical Instructor in Medicine
HARRY A. BISHOP, M.D.....Clinical Instructor in Neurology
WILLIAM HOUSTON LITTLEPAGE, M.D., Clinical Instructor in Medicine
WILLIAM DAVID TEWKSBURY, M.D.....Clinical Instructor in Medicine
JAMES CHARLES HASSALL, M.D.,
Instructor in Psychiatry and Clinical Neurology

Instruction in Medicine is so given as to conform to the most modern requirements. The work begins in the second year with a complete course in history-taking and normal physical diagnosis, and is continued through the third and fourth years. During the latter two years the course consists of lectures, recitations, a study of case histories, clinical conferences, and practical work in the clinical laboratory and at the bedside. The work is made as practical as possible.

The third-year class is divided into small sections, which are required to attend the daily dispensary service in the Uniuersity Hospital, where they are drilled especially in history-taking and in the technique of practical physical diagnosis.

The fourth-year class is similarly divided into small sections, and these are required to attend the daily ward clinics in the University Hospital and ward clinics in the Garfield Memorial Hospital, Children's Hospital, and the Tuberculosis Hospital of the District of Columbia.

The system of ward clinics to small groups of students affords a most effective method of studying disease and gives to every student an opportunity of following a large assortment of diseases from their commencement to the termination of illness; in no other way is it possible to get a more practical knowledge of the methods of studying disease or a more intimate knowledge of disease itself.

Every patient in the medical wards of the University Hospital is assigned to one, or at most two, senior students, who are required (under proper supervision) to take the history, to make and record a complete physical examination, to determine after due study the nature of the illness (diagnosis), to outline a plan of treatment, and to make daily notes of the progress of the case.

A weekly amphitheater clinic is given to third-year students in a body and a similar clinic to the fourth-year class. A series of special neurological clinics is provided for the senior class at the Government Hospital for the Insane, where there is a great wealth of material (see announcement of Psychiatry and Clinical Neurology).

SUBJECT	YEARS	HOURS Total Didactic Lab. and Clinical	HOURS Didactic not to exceed
Medicine	II, III, IV		
General Medicine		606	200
*Clinical Microscopy		48	0
†Clinical Chemistry		48	12
Physical Diagnosis		80	40
Tropical Diseases		12	12
Dermatology		48	12
Pediatrics		120	18
Neurology		64	24
Psychiatry		42	12
Medical Jurisprudence		30	30
		— 1098	— 360

TROPICAL MEDICINE

EDWARD RHODES STITT, A.B., M.D., Surgeon U.S.N.....Professor

The course in tropical diseases is similar to that given in the Army and Navy Medical Schools, and consists of didactic lectures, quizzes, and laboratory instruction, with particular reference to the parasitic, protozoal diseases common in the tropics and in the southern part of the United States.

PSYCHIATRY AND CLINICAL NEUROLOGY

WILLIAM ALANSON WHITE, M.D., Superintendent of the Government Hospital for the Insane.....Professor
BERNARD GLUECK, M.D.....Instructor
HARRY A. BISHOP, M.D.....Clinical Instructor
JAMES CHARLES HASSALL, M.D.....Instructor

A series of lectures and clinics is given upon the subject of insanity in its various forms.

These clinics are given at the Government Hospital for the Insane, which, with its more than three thousand beds, affords one of the largest clinics in this country.

Students are taught in the same classes with students of the Army and Navy Medical Schools.

*See also announcement under Bacteriology and Pathology.
†See also announcement under Chemistry.

PEDIATRICS

GEORGE NICHOLAS ACKER, A.M., M.D.....Professor
EDGAR PASQUAL COPELAND, M.D.....Associate
HARRY HAMPTON DONNALLY, M.D.....Clinical Associate

Didactic and clinical lectures, bedside and dispensary clinics are given upon diseases of infants and children and the importance of the proper management of these diseases by diet and hygiene.

The children's clinic, at the Children's Hospital, affords ample material for practical teaching in this branch.

PHYSICAL DIAGNOSIS

WILLIAM CABELL MOORE, M.D.....Associate
JANVIER WHITTON LINDSAY, A.B., M.D.....Instructor

Instruction is given in the principles and methods of physical examination by means of recitations, section work on normal subjects, and with clinical cases which typically represent diseased conditions.

DERMATOLOGY

RANDOLPH BRYAN CARMICHAEL, M.D.....Professor
CHARLES AUGUSTUS SIMPSON, M.D.....Associate

The lectures in this course will be principally clinical, supplemented by didactic lectures, illustrated by diagrams, models, and photographic illustrations of disease from life.

MEDICAL JURISPRUDENCE

WILLIAM CREIGHTON WOODWARD, LL.M., M.D.....Professor

This course is designed to familiarize students with the rights and obligations of physicians, both legal and ethical, and to qualify them to apply the facts of medical science to the solution of problems in law.

SURGERY

WILLIAM CLINE BORDEN, M.D.....Professor
DANIEL KERFOOT SHUTE, M.D.....Clinical Professor of Ophthalmology
CHARLES WILLIAMSON RICHARDSON, M.D.,
Professor of Laryngology and Otology
AURELIUS RIVES SHANDS, M.D.....Professor of Orthopedic Surgery
FRANCIS RANDALL HAGNER, M.D.,
Professor of Genito-Urinary Diseases and Venereal Diseases
WILLIAM KENNEDY BUTLER, M.D.....Professor of Ophthalmology
LUTHER HALSEY REICHELDERFER, M.D.....Clinical Professor
LOUIS ANATOLE LA GARDE, M.D.....Professor of Military Surgery
OSCAR ADDISON MACK MCKIMMIE, M.D.,
Clinical Professor of Laryngology and Otology

THOMAS CHARLES MARTIN, M.D.....Professor of Proctology
HARRY HYLAND KERR, M.D..... Clinical Professor
WILLIAM PINKNEY REEVES, M.D.....Clinical Professor
CHARLES STANLEY WHITE, M.D.....Associate Professor
DANIEL WEBSTER PRENTISS, S.B., M.D.....Clinical Associate
EDWARD GRANT SEIBERT, M.D..Clinical Instructor in Ophthalmology
TRUMAN ABBE, M.D.....Clinical Instructor
JOHN POTTS FILLEBROWN, M.D.....Clinical Instructor
EDMUND THOMAS MURDAUGH FRANKLIN, M.D.....Clinical Instructor
CHARLES WILBUR HYDE, M.D.....Instructor in Anaesthesia
ADAM KEMBLE, M.D....Clinical Instructor in Genito-Urinary Surgery
HOMER GIFFORD FULLER, M.D.,
Clinical Instructor in Genito-Urinary Surgery and Venereal Diseases
CLINE N. CHIPMAN, M.D.....Instructor in Anaesthesia
ALBERT PERKINS TIBBETS, M.D.,
Clinical Instructor in Laryngology and Otology
DANIEL LE RAY BORDEN, M.D.....Instructor
WILLIAM HENRY HUNTINGTON, M.D.,
Clinical Instructor in Laryngology and Otology
J. IRVING SLOAT, M.D.....Instructor
HARRY SAMUEL LEWIS, M.D.....Clinical Instructor
OLIVER CLEMENCE COX, M.D..... Instructor in Minor Surgery
WILLIAM BERRY MARBURY, M.D.....Instructor
JOSEPH DECATUR ROGERS, M.D.....Instructor

The principles of surgery are presented in a systematic course of lectures, so that the student may obtain a comprehensive and adequate concept of the science and art of surgery. These lectures are followed by recitations, so that the subject-matter may be thoroughly impressed upon the students. The special divisions of surgery are taught by associates and instructors who have made specialties of these branches. The clinical material in the University Hospital and Dispensary, being under the control of the Faculty, is directly used throughout the course to illustrate the subjects taught and to familiarize the students with actual clinical conditions.

Surgical technique is taught by instruction in the preparation of materials used in antiseptic and aseptic surgery, the preparation of the patient, and the sterilization of instruments. Practical instruction is given in the Hospital and Dispensary in the application of splints, bandages, and dressings used in the various surgical diseases and injuries. Thorough instruction and practical demonstrations are given in the administration of anaesthetics.

Clinical teaching is carried on in the University Hospital and Dispensary, and in other hospitals of the city to which members of the Faculty are attached. Amphitheater clinics are given, in which the general practice of surgical diagnosis and operative technique and therapeutic procedure are shown.

Ward clinics and bedside instruction are made a prominent part of the course. The classes are divided into sections, which are regularly assigned to clinical work in the University Hospital and Dispensary, and in other hospitals and dispensaries. Senior students are assigned in rotation to individual cases in the wards of the University Hospital.

Practical work is required of each student in the preparation of dressings and sterilization of instruments. Each student is required to give, under instruction, at least six anaesthesias and to assist in at least six operations.

Thorough courses are given in operative surgery and proctology.

SUBJECT	YEARS	HOURS Total Didactic and Clinical	HOURS Didactic not to exceed
Surgery	II, III, IV		
General Surgery		540	144
Minor Surgery		40	20
Radiography		16	0
Fractures, etc		16	16
Military Surgery		8	8
Ophthalmology		64	16
Laryngology and Otology		60	24
Genito-Urinary Surgery		48	16
Orthopedics		48	16
		— 840	— 260

ORTHOPEDICS

AURELIUS RIVES SHANDS, M.D. ..... Professor

A course of lectures and recitations on the pathology, etiology, course, termination, and treatment of chronic joint diseases, with clinical instruction in the application of special apparatus and of plaster of Paris to the correction of deformities.

GENITO-URINARY DISEASES

FRANCIS RANDALL HAGNER, M.D. ..... Professor
ERNEST FROTHINGHAM KING, M.D. ..... Clinical Professor
HOMER GIFFORD FULLER, M.D. ..... Clinical Instructor
ADAM KEMBLE, M.D. ..... Clinical Instructor

A thorough course of instruction in genito-urinary diseases is given by lectures, recitations, section clinics, and bedside teaching.

MILITARY SURGERY

LOUIS ANATOLE LA GARDE, M.D. ..... Professor

The treatment of gunshot wounds with special reference to civil practice is given in a course of lectures and demonstrations, fully illustrated by lantern slides, X-ray photographs, and actual specimens from a collection made after years of study and experimentation.

The use of the new armaments in recent wars and the characteristic features of the wounds caused by them, as well as the treatment of gunshot wounds in peace and war are fully dealt with.

OPHTHALMOLOGY

WILLIAM KENNEDY BUTLER, A.M., M.D. .....Professor
DANIEL KERFOOT SHUTE, A.B., M.D.....Clinical Professor
EDWARD GRANT SEIBERT, M.D.....Clinical Instructor

The course of lectures on this subject is to direct attention to the elementary principles of the subject. It is not intended to qualify the student as a specialist, but to give him a knowledge of what every general practitioner ought to know. The course is supplemented by clinical instruction.

LARYNGOLOGY AND OTOLOGY

CHARLES WILLIAMSON RICHARDSON, M.D.....Professor
OSCAR ADDISON MACK MCKIMMIE, M.D.....Clinical Professor
EDWARD GRANT SEIBERT, M.D.....Instructor
ALBERT PERKINS TIBBETS, M.D.....Clinical Instructor
WILLIAM HENRY HUNTINGTON, M.D.....Clinical Instructor
SAMUEL HARRISON GREENE, M.D.....Clinical Instructor

The course comprises lectures and clinical instruction on diseases of the nasal passages, pharynx, larynx, and the ear. Practical demonstrations are given in the use of the laryngoscope and other instruments required in these special branches.

OBSTETRICS

HURON WILLIS LAWSON, S.M., M.D. .....Professor
WILLIAM SINCLAIR BOWEN, M.D.....Clinical Professor
ELIJAH WHITE TITUS, M.D.....Instructor
ALBERT ELWOOD PAGAN, M.D.....Instructor
SACKS BRICKER, M.D.....Clinical Instructor
JOSIAH BAKER HENNEBERGER, M.D.....Clinical Instructor

The course in obstetrics comprises lectures, recitations, laboratory demonstrations and clinical instruction and extends over the third and fourth years. The lectures serve to outline the subject matter and the recitations insure careful preparation on the part of the student. Special laboratory studies dealing with anatomy, embryology and pathology in relation to obstetrics are conducted in the different laboratories concerned. Models, manikins and cadavers are utilized in teaching the mechanism of labor and obstetrical operations. Clinical instruction is given to the classes in small sections at different hospitals and in the out-patient obstetrical service. Beginning about the middle of the third year the student is given practical instruction in making antepartum examinations and he also observes the management of labor cases. During the fourth year he conducts, under the super-

vision of a paid instructor, from six to ten labor cases in the large and well-organized out-patient maternity service and submits written reports upon the cases attended.

SUBJECT	YEARS	HOURS: Totals Didactic and Clinical about	HOURS: Didactic not to exceed
Obstetrics	III and IV	192*	64

GYNECOLOGY

JOHN WESLEY BOVÉE, M.D. ..... Professor
ALBERT LIVINGSTON STAVELY, M.D. ..... Clinical Professor
GIDEON BROWN MILLER, M.D. ..... Associate
J. LEWIS RIGGLES, M.D. ..... Associate
VIRGIL B. JACKSON, M.D. ..... Clinical Instructor
DANIEL LERAY BORDEN, M.D. ..... Clinical Instructor
ALBERT ELWOOD PAGAN, M.D. ..... Instructor

Gynecology as taught in the third year comprises a course of lectures and text-book recitations. In the fourth year individual students are assigned to cases in the wards of the University Hospital, and the class is taken in sections of one to two students each into the Gynecological Dispensaries for clinical instruction in examinations, diagnosis, and treatment. In larger sections the class attends amphitheater and ward clinics given by the Professor of Gynecology and his assistants.

SUBJECT	YEARS	HOURS: Total Didactic and Clinical	HOURS: Didactic not to exceed
Gynecology	III and IV	144	48

HYGIENE

EDGAR SNOWDEN, M.D. ..... Professor

The course in Hygiene is given principally by recitation from a prescribed text-book. Consideration is given to domestic and municipal sanitation and to the principles underlying legislative control of public health.

SUBJECT	YEAR	HOURS: Total Didactic and Clinical	HOURS: Didactic not to exceed
Hygiene	II	32	32

* The total number of clinic hours cannot be given, as each student is required to attend ten cases, exclusive of the demonstration work and Ward and Dispensary Clinics above enumerated.

CLINICAL FACILITIES

The following hospitals are open to the students of this school for clinical study, and are extensively used for that purpose:

University Hospital and the University Dispensary

H Street, between Thirteenth and Fourteenth Streets N. W. and adjacent to the Medical Building.—The Hospital and Dispensary are part of the educational equipment of the University. They are integral parts of the Medical School, are entirely controlled by the Faculty of Medicine, and are used primarily in instructing the students in clinical work. The Dispensary has a large out-patient service in all departments, to which several thousand visits are made annually.

The staff is composed of members of the Faculty of Medicine.

Garfield Memorial Hospital

Florida Avenue and Tenth Street N. W.—This institution has 118 charity beds. Clinics are given regularly throughout the session by members of the Faculty connected with the visiting staff of the hospital.

Members of the Faculty on the visiting staff: Professors CLAYTOR, MACKALL, MORGAN and LEECH, Clinical Medicine; Professors REICHELDERFER and KERR, Clinical Surgery; Professor STAVELY, Clinical Gynecology; Professor CARMICHAEL, Clinical Dermatology Professors SHUTE and BUTLER, Clinical Ophthalmology; Professor HAGNER, Clinical Genito-Urinary Surgery; Professor YARROW, Consulting Physician; Professor BOWEN, Clinical Obstetrics.

Children's Hospital

W Street, between Twelfth and Thirteenth Streets N. W.—Regular instruction is given in the medical and surgical wards by members of the Faculty on the visiting staff of the hospital. This institution has 100 charity beds. There is also a large out-patient department, to which students are regularly assigned for clinical instruction.

Members of the Faculty on the visiting staff: Professor YARROW, Consulting Physician, Professors REICHELDERFER, KERR and WELLINGTON, Clinical Surgery; Professors ACKER and LEECH and Drs. COPELAND and DONNALLY, Clinical Medicine.

Emergency Hospital and Central Dispensary

1711 New York Avenue.—This hospital has 100 charity beds, and has a very large out-patient service. The large emergency service gives exceptional facilities in clinical surgery, particularly in fractures and dislocations which are taught in regular clinics by the instructor in this subject.

Members of the Faculty on the visiting staff: Professors HAGNER and KING, Clinical Genito-Urinary Diseases; Professors WHITE and

CARR, and Drs. PRENTISS, JACKSON and LEWIS, Surgery; Professor MORGAN and Drs. D. G. SMITH and SNOWDEN, Clinical Medicine; Professor CARMICHAEL, Clinical Dermatology; Dr. MILLER, Clinical Gynecology; Professor SHANDS, Orthopedics; Professor SHUTE, Ophthalmology; Dr. FRENCH, Pediatrics.

Columbia Hospital for Women

Twenty-fifth Street and Pennsylvania Avenue N. W.—This hospital has 40 charity beds for diseases peculiar to women, and 40 charity maternity beds. Both the obstetrical and the gynecological services are particularly good and are fully utilized for students.

Members of the Faculty on the visiting staff: Professor BOVÉE and Drs. MILLER and D. L. BORDEN, Clinical Gynecology; Professor BOWEN and Dr. RIGGLES, Clinical Obstetrics; Professor SHUTE, Ophthalmology; Professor RUFFIN, Visiting Physician.

The Government Hospital for the Insane

This hospital is maintained by the United States Government. It has 3,000 beds. Clinical instruction in mental diseases is given by the superintendent of the hospital, Professor W. A. WHITE, and Drs. GLUECK and HASSALL. Other members of the Faculty on service at this hospital are Professor FRANZ; Professor SHUTE, Consulting Ophthalmologist; Professors RUFFIN and MORGAN, Consulting Physicians.

Episcopal Eye, Ear, Throat, and Nose Hospital

Fifteenth Street, between L and M Streets N. W.—Excellent opportunities for clinical instruction in ophthalmology, otology, laryngology, and rhinology are offered by this hospital.

Members of the Faculty on its staff: Professor RICHARDSON, Clinical Otology and Laryngology; Professor MCKIMMIE and Drs. HUNTINGTON and GREENE, Clinical Otology and Laryngology; Professor ACKER, Consulting Physician.

Lutheran Dispensary

Fourteenth and N Streets N. W.—This dispensary affords good opportunities for clinical study of diseases of the eye, ear, throat, and nose.

Members of the Faculty on its staff: Professor BUTLER, Surgeon-in-Charge; Dr. SEIBERT, Ophthalmology; Professor ACKER, Consulting Physician.

Casualty Hospital

Massachusetts Avenue N. E.—Opportunities in emergency and dispensary work are offered by this institution.

Members of the Faculty on its staff: Professor ACKER, Consulting Physician; Professor REEVES and Drs. MARBURY and ROGERS, Clinical Surgery.

Tuberculosis Hospital

Fourteenth and Upshur Streets N. W.—Members of the Faculty on its staff: Professor CLAYTOR, and Dr. TEWKSBURY, Clinical Medicine; Dr. REICHELDERFER, Clinical Surgery; Professor RICHARDSON, Ophthalmology.

CLASSIFICATION AND ADVANCEMENT OF STUDENTS

Students are divided into four classes, according to their proficiency and the time spent, viz: first year, second year, third year, and fourth year.

Proficiency in all subjects is marked on the scale of 100.

Examinations are held at the end of the course in each subject.

In determining the proficiency of a student his laboratory and clinical work, his quiz record, attendance, and result of examination are all considered.

To be *advanced* a student must obtain a general average of 75 or more in all subjects of the year, and must not fail in more than one major or two minor subjects.

Students who obtain a general average of 75 or more, but who fail in not more than one major or two minors, may be advanced *conditioned* and may be permitted at the next examination period a re-examination in the subjects in which they fail, but all conditions must be removed before a student can be again advanced.

Students who fail of advancement or graduation will not be allowed re-examination, except by special permission of the Faculty, and must repeat all subjects in which they obtained less than 85 during the year, and pass an examination on all majors of preceding years in which they obtained less than 85 before they can be advanced or graduated. Students who fail to appear at the regular examinations will not be examined until the next regular examination, except by special permission of the Faculty. In special examinations a fee of $5 will be charged for each subject. Students who fail to pass satisfactorily their practical laboratory examinations will be required to repeat the laboratory courses. Students will not be admitted to examination unless they have paid all fees due at the time.

A student who has failed of advancement after repeating any one of the first three years or who has failed of graduation after repeating his final year will not be permitted to maintain his connection with the school.

REQUIREMENTS FOR GRADUATION

Every candidate for the degree of Doctor of Medicine must be at least twenty-one years of age and of reputable character. He must have complied with the admission and other requirements herein set forth. He must have attended at least 80 per cent of all required instruction during four sessions of 32 weeks each in four separate years; must have

satisfactorily completed all his courses and passed all his examinations. He must be present at the time specified for the final examinations, and also at Commencement. The degree is not conferred in the absence of a candidate except by special consent of the President's Council. Graduates of other accredited colleges who desire degrees must spend one year in residence at this school.

Candidates who in their work and examinations attain general averages of 90 or more will be presented to the Faculty for consideration with reference to being designated as "having graduated with distinction." If in the opinion of the Faculty such candidates have shown themselves to be possessed of more than ordinary merit, they will have inscribed upon their diplomas beneath their degree the words "with distinction."

PRIZES

A prize from the Ordronaux Prize Endowment will be awarded under conditions determined by the University authorities.

Professor ACKER gives a prize for the best examination in Pediatrics.

Professor BUTLER gives a prize for the best examination in Ophthalmology.

Professor HAGNER gives a prize for the best examination in Genito-Urinary Diseases.

HOSPITAL APPOINTMENTS

Internes are annually appointed in the University Hospital. These appointments are made upon competitive examinations under conditions determined by the governing authorities of the Hospital. Appointments to similar positions are open to the graduates and undergraduates of this school in the following other hospitals of the city: Garfield Memorial Hospital, Emergency Hospital, Columbia Hospital for Women, Casualty Hospital, Providence Hospital, Washington Asylum Hospital, Children's Hospital, Episcopal Eye, Ear, Throat, and Nose Hospital.

FEES AND CONTINGENT EXPENSES

1. Matriculation (payable but once)	$5
2. Annual library fee	3
3. Tuition fee per annum, including all charges for materials	150
4. Graduation fee	10
5. Fee for a certificate under the seal of the University	2

A deposit of $10 to cover breakage in laboratory courses and damage to the building or apparatus is required. Any unforfeited balance is returned to the student.

Persons are allowed to register as auditors for the tuition fees without being required to take active part in the exercises or to pass examinations but no credit will be allowed for such attendance.

No registration will be accepted for less than a full half-year, and no change in the courses undertaken at the time of registration will be made unless approved by the Dean. Registration in the Medical School is for a period not to exceed one year at a time, and acceptance by the School of a student's matriculation fee or registration does not in any way obligate the School to accept that student for any subsequent year.

Students are urged to purchase their own microscopes, but those who do not care to do so may rent them from the University at the following rates:

Microscope for Histological Laboratory use or for Bacteriological, Pathological, and Clinical Microscopy Laboratory use..... 6

Matriculation, library, other fees and deposits are due in full in advance. Tuition may be paid in eight monthly installments in advance. Students who are unable to pay their fees monthly in advance will be required to file an acceptable personal or corporate bond of $200 as security for future payment. In every instance all indebtedness must be discharged on or before May 1 of the current school year. All fees are payable at the office of the Dean.

FEES FOR PRELIMINARY (PREMEDICAL) YEAR

1. Matriculation (payable but once).....	$5
2. Annual library fee.....	2
3. Tuition fee per annum, including all charges for materials.....	150
4. Fee for a certificate under the seal of the University..	2
5. Deposit for breakage.....	10
6. Rental of microscope for Biological Laboratory use...	5

WITHDRAWALS

Withdrawals will be granted only on recommendation of the Dean and the approval of the President.

A certificate of work actually done will be given to any student granted a withdrawal or a transfer to another school during the session. A written request for withdrawal or transfer must be filed with the Dean and no permission to withdraw or transfer, and no certificate of work done will be given a student unless all fees and dues chargeable against him up to the end of the month in which he withdraws have been paid.

BOARD AND ROOMS

A register of boarding houses is kept by the Treasurer. Accommodations cost from $25 to $40 a month.

For catalogues, application blanks, and further information, address

THE DEAN
Medical School,
The George Washington University,
1325 H Street N. W., Washington, D. C.

DENTAL SCHOOL

FACULTY

CHARLES HERBERT STOCKTON, LL.D....PRESIDENT OF THE UNIVERSITY
JOHN ROLAND WALTON, D.D.S.,
Dean and Professor of Prosthetic Dentistry and Orthodontia
HENRY CLAY THOMPSON, D.D.S.....Professor of Operative Dentistry
CHARLES EDWARD MUNROE, Ph.D., LL.D. .....Professor of Chemistry
CHARLES STANLEY WHITE, M.D.....Clinical Professor of Oral Surgery
NOBLE PRICE BARNES, M.D.,
Professor of Materia Medica and Therapeutics
OSCAR BENWOOD HUNTER, M.D.,
Professor of Histology and Embryology and Associate Professor of Anatomy
CARL LAWRENCE DAVIS, M.D.....Professor of Anatomy
FRANK ADELBERT HORNADAY, S.B., M.D.,
Professor of Physiological Chemistry
JOSEPH DUERSON STOUT, Ph.D, M.D.....Professor of Physiology
GEORGE MILLER SHARP, D.D.S.....Professor of Orthodontia
MILLARD FILLMORE THOMPSON, M.D.....Professor of Oral Surgery
JOHN ROBERT DE FARGES, D.D.S.....Associate Professor of Dental Metallurgy, Jurisprudence, Economics, and Ethics
CHARLES TURK BASSETT, D.D.S.,
Associate Professor in Charge of the Dental Infirmary
WILLIAM FRANCIS LAWRENCE, D.D.S.,
Associate Professor of Prosthetic Technics
D. DEWITT BEEKMAN, D.D.S.,
Associate Professor of Materia Medica and Therapeutics
EUGENE ROGER STONE, D.D.S.....Associate Professor of Oral Surgery
JAMES WALTER BERNHARD, D.D.S.,
Associate Professor of Crown and Bridge Work
WALTER LOWELL HAGAN, D.D.S.,
Associate Professor of Operative Technics
JAMES HAROLD COLLINS, M.D.....Associate Professor of Physiology
CHARLES GARDNER SHOEMAKER, D.D.S.,
Associate Professor of Operative Technics
JOHN WINSLOW TAYLOR, D.D.S.....Instructor in Prosthetic Technics
HENRY CISSEL YOUNG, D.D.S.. .....Instructor in Prosthetic Technics
CHARLES WALTER RICH, D.D.S.....Instructor in Prosthetic Technics
JOHN PRESTON MARSTELLER, D.D.S.,
Instructor in Prosthetic Technics
ORVILLE NEWTON FANSLER, D.D.S., Instructor in Prosthetic Technics

JASPER NEWTON ROBERTS, D.D.S..Instructor in Prosthetic Technics
EDWARD EARL GOLDEN, D.D.S., Instructor in Crown and Bridge Work
HENRY MERLE SPILLAN, D.D.S..Instructor in Crown and Bridge Work
JAMES ROBERT SCOTT, M.D...Instructor in Bacteriology and Pathology
RICHARD KNIGHT THOMPSON, D.D.S., Instructor in Operative Technics
ROBERT LLOYD ELLER, D.D.S.....Radiographer
EDWIN ROSS TILLEY, D.D.S.....Instructor in Operative Technics
JOSEPH ALTSHULER FRIEDMAN, D.D.S.,
Instructor in Prosthetic Technics
SAMUEL DANEMANN, D.D.S.....Demonstrator in the Dental Infirmary

GENERAL STATEMENT

The first course of lectures in the Dental School began November, 1887, under the title of "The Columbian University Dental Department." The course then extended over two years of five months each. Two years later the course was extended to seven months; but, this additional time being found inadequate to keep pace with the ever-increasing demand for higher dental education, the course was gradually increased, until now it extends over three years of eight months each.

The next academic year begins on Wednesday, September 27, 1916, and ends on Wednesday, June 6, 1917. Students should register promptly at the office of the Dean at the beginning of the session, and no student can be received and credited with a full term after ten days from the first lecture. Final examinations are held at the conclusion of the instruction in each subject. For further information communicate with the Dean of the Dental School.

ADMISSION

Candidates for matriculation must show that they are fitted by previous education to study dentistry. For this purpose they must present a satisfactory certificate of their attainments or they must pass an examination.

Candidates are admitted without examination:

1. Upon presenting a diploma or certificate of graduation from a four-year high school, or an equivalent certificate or diploma.

2. Upon presenting a certificate of admission to the Freshman class of a college having like admission requirements.

Candidates unable to comply with the foregoing requirements are admitted upon passing an examination based upon the general requirement for graduation from an accredited four-year high school.

The scope of the different subjects is indicated in standard high school text-books.

COURSE OF INSTRUCTION

The course of instruction extends through three years of eight months each. The subjects taught during the course are divided as follows:

FIRST YEAR	SECOND YEAR	THIRD YEAR
Anatomy.	Organic Chemistry.	Operative Dentistry.
Physiology.	Operative Dentistry.	Orthodontia.
General Chemistry.	Prosthetic Dentistry.	Prosthetic Dentistry.
Histology.	Pathology.	Oral Surgery.
Operative Technics.	Dental Medica.	Orthodontia Technics.
Prosthetic Technics.	Operative Technics.	Metallurgy.
Special Anatomy.	Prosthetic Technics.	Prosthetic Technics.
Crown Work.	Infirmary Practice.	Infirmary Practice.
Materia Medica.	Bacteriology.	Dental Therapeutics.
	Dental Histology.	Dental Pathology.
	Orthodontia Technics.	Dental Bacteriology.
	Infirmary Practice.	Oral Prophylaxis.
	Clinics.	Dental Jurisprudence, Economics and Ethics.
	Comparative Dental Anatomy.	Infirmary Practice.
	Crown and Bridge-work.	Clinics.
	Metallurgy	Crown and Bridge-work.
	Physiology	Radiography.

These studies are further described in the following pages.

Hours of recitation, daily from 4.50 p.m. to 6.30 p.m; from 7.30 to 10.30 p.m. Dental Infirmary, 1.30 p.m. to 5 p.m.

PROSTHETIC DENTISTRY

JOHN ROLAND WALTON, D.D.S.....Professor

All branches in this department will be under the supervision of the professor. He will deliver the lectures and manage in person and through his assistants the quiz work and course of instruction. This system will prevent confusion in method and technical procedures.

OPERATIVE DENTISTRY, DENTAL ANATOMY AND PATHOLOGY

HENRY CLAY THOMPSON, D.D.S.....Professor

This course embraces lectures on the special anatomy and physiology of the teeth. The origin, growth, and eruption of the teeth receive minute attention, and are illustrated as their importance demands.

The methods of treating, filling, and extracting teeth receive attention in the lecture-room, and are demonstrated clinically by proficient operators. Extended consideration is given to Black's method of dental pathology and therapeutics. This chair has personal supervision of the department of Operative Technics and the infirmary.

CHEMISTRY

CHARLES EDWARD MUNROE, Ph.D., LL.D.....Professor
FRANK ADELBERT HORNADAY, S.B., M.D.....Professor
RICHARD KNIGHT THOMPSON, D.D.S.....Instructor

The instruction in this subject embraces:

A short discussion of the principles of Physics in their relation to Chemistry, the principle of chemical philosophy, and the laws of chemical combination.

A study of the elements, metallic and non-metallic; the preparation, properties, and reaction of their different compounds and their application in dentistry; Organic Chemistry, with special attention to those organic compounds that are of practical use; laboratory instruction in the determination of acids and bases, analyses of alloys, etc.

A laboratory course, both didactic and laboratory, consisting of about twenty-five periods of three hours each, is given in metallurgy, including the use and care of furnaces, the construction of an electric furnace, the study of the occurrence in nature, methods of isolation, properties and use of the commoner metals of value in dentistry. Each student prepares a considerable number of alloys, recovers gold and silver from alloy scraps and makes analyses of alloys.

PHYSIOLOGY

JOSEPH DUERSON STOUT, A.M., M.D.....Professor
JAMES HAROLD COLLINS, M.D.....Associate Professor

This subject is taught in lectures, recitations, and laboratory exercises. In the lectures and recitations special emphasis is placed upon those parts of physiology that have a known bearing upon dental medicine and surgery, especially digestion, secretion, and the nervous system. Three laboratory periods a week during a semester give the student first-hand knowledge of the principal facts about the general functions of tissues, and the special functions of the nervous system, the special senses, the heart, circulation, digestion, and respiration.

ANATOMY

CARL LAWRENCE DAVIS, M.D.....Professor
OSCAR BENWOOD HUNTER, M.D.....Associate Professor

The instruction in Anatomy is given in a graded course of lectures, recitations from prescribed text-books, and especially by practical work in the dissection of the cadaver. The lectures are illustrated by the use of dry and wet dissections of the cadaver, by models, diagrams, charts, and stereopticon views.

Practical work in osteology and in dissection of the head are of fundamental importance. For the study of these subjects the class is divided into sections in order to make the instruction as practical as possible. The bones of the skeleton are placed in each student's hands, and he is instructed and quizzed upon all their important features.

MATERIA MEDICA AND THERAPEUTICS

NOBLE PRICE BARNES, M.D.....Professor
D. DEWITT BEEKMAN, D.D.S.....Professor

Instruction in these subjects embraces:

The study of crude drugs and their preparations and the art of prescribing; the physiological action of drugs in the human system; the practical application of drugs and other therapeutical agencies to the prevention and cure of diseases and the relief of suffering, together with their antidotal relation to poisons.

The subject is taught by means of lectures, recitations, and blackboard illustrations, and is made practical to as great a degree as is compatible with a sufficiently thorough understanding of its principles.

In connection with this chair is a pharmaceutical laboratory, well equipped with modern appliances, in which are taught the making of typical preparations of the Pharmacopoeia, prescription writing, and the compounding of prescriptions.

Special attention is given to those drugs that are of most value in the practice of dentistry.

ORAL SURGERY

CHARLES STANLEY WHITE, M.D.....Clinical Professor
MILLARD FILLMORE THOMPSON, D.D.S., M.D. .....Professor
EUGENE ROGER STONE, D.D.S.....Associate Professor

Instruction in this subject consists of a systematic course of lectures, followed by recitations, and clinical teaching is carried on in the Infirmary and Hospital Dispensary. Amphitheatre clinics are given in the University and other hospitals to which the members of the Faculty are attached. A free bed in the University Hospital is at the disposal of this department. Operations and demonstrations on the cadaver form a valuable part of the course.

The lectures deal with applied anatomy, surgical bacteriology and pathology, surgical technique, wounds, hemorrhage, shock, surgical diseases and injuries of the face, mouth and jaws, extraction of teeth and local and general anesthesia.

Students are expected to attend the amphitheatre clinics when notified and are required to present at least one case-history as a prerequisite to examination.

Text-Books and Works of Reference.—Blair, Surgery and Diseases of the Mouth and Jaws; Scudder, Tumors of the Jaws; Winters, Exodontia; Hewitt, Anesthetics.

HISTOLOGY

OSCAR BENWOOD HUNTER, M.D.....Professor

The course in Histology consists in a systematic presentation of the subject of the minute anatomy of the various parts of the body, especial attention being devoted to the histology of the teeth and neighboring structures. The subject is presented partly by systematic lectures, and more especially by the practical study by the individual students of actual specimens under the microscope. The methods of preparation of microscopical specimens are presented and practiced in the laboratory. The projection microscope, affording valuable aid in illustrating and presenting the subject, is constantly used.

PATHOLOGY AND BACTERIOLOGY

MARCUS WARD LYON, JR., M.D., Ph.D.....Professor
JAMES ROBERT SCOTT, A.B., M.D.....Instructor

The course begins with a consideration of the principles involved in the process of sterilization by dry and moist heat, the relative value and mode of application of each, and an explanation of the construction of the apparatus employed for the purpose. The use and construction of the thermostat is taken up at the same time and the student taught how he can dispense with these costly appliances in emergencies.

The composition and modes of preparation of the various nutritive media are next considered, working formulas given, and the student required to prepare them at least once in the laboratory. This is followed by a discussion of bacteria as a class, their position in the biological world, their classification, distribution, and the general and special characters that belong to them.

After this preparatory training the various methods in use for the isolation and study of bacteria are taught by practical demonstration and practiced by the students, after which the most important pyrogenic organisms are studied in detail, giving special attention to those found in the nasal and oral cavities.

The aim of the course is chiefly to afford the students an opportunity to become practically familiar with bacteriological working methods, and to enable them to isolate and identify the bacteria present in suppurative processes, as well as to comprehend intelligently the references to micro-organisms in the current professional literature of the day.

PROSTHETIC TECHNICS

WILLIAM FRANCIS LAWRENCE, D.D.S. ..... Associate Professor
JOHN WINSLOW TAYLOR, D.D.S. ..... Instructor
HENRY CISSEL YOUNG, D.D.S. ..... Instructor
CHARLES WALTER RICH, D.D.S. ..... Instructor
JOHN PRESTON MARSTELLER, D.D.S. ..... Instructor
ORVILLE NEWTON FANSLER, D.D.S. ..... Instructor
JASPER NEWTON ROBERTS, D.D.S. ..... Instructor
EDWIN ROSS TILLEY, D.D.S. ..... Instructor
JOSEPH ALTSHULER FRIEDMAN, D.D.S. ..... Instructor

The technic laboratories are thoroughly equipped for their particular work. The course in prosthetic technics extends through the Freshman, Junior, and Senior years.

The first year is a technical and didactic course. The students are taught the proper equipment of a dental laboratory; the preparation of the mouth for dentures; methods of taking impressions of the mouth and manipulation of the various impression materials; the preparation and mounting of models; selection and anatomically arrangement of teeth; the construction of plastic dentures and crowns with general details.

In the Junior class the course is a review of the Freshman year with extended technical and didactic work, embracing a practical course in taking impressions, making models, dies, and casting; swaging, rimming, attaching teeth by rubber, and in general construction of metal dentures, crown and bridge work.

The Senior year is a practical course, embracing the swaging of plates, teeth attached by soldering, clasps, porcelain work, advanced bridge work, removable bridges, and the detailed construction of all work in prosthetic dentistry.

The work of the Department is under the immediate supervision of the associate professor.

ORTHODONTIA

GEORGE MILLER SHARP, D.D.S. ..... Professor

Junior year Orthodontia is a technical course with lectures and demonstrations. The Senior year is a review of the Junior studies with advanced lectures upon the irregularities of the teeth, local and constitutional. Each student is required to make a number of appliances upon models and practically correct cases of irregularity.

OPERATIVE TECHNICS

CHARLES GARDNER SHOEMAKER, D.D.S. ..... Associate Professor
WALTER LOWELL HAGAN, D.D.S. ..... Associate Professor
RICHARD KNIGHT THOMPSON, D.D.S. ..... Instructor
EDWIN ROSS TILLEY, D.D.S. ..... Instructor

This subject is taught by lectures, illustrated by enlarged models and drawings, together with demonstrations of instruments and materials. The students perform exercises in manipulative procedure under the direction of the instructors.

The subjects embraced in the course consist, first, of the study of dental nomenclature, that the student may acquire an understanding of the technical terms used in the course of his dental studies. This is followed by descriptive dental anatomy, and the forms and surface markings of each tooth studied, the natural teeth, as well as enlarged models and drawings being used for the purpose. Each student is required to make various sections of the teeth for the thorough study of the pulp chambers and root canals and their relations to the external surface of the teeth.

That tooth-forms may be more perfectly impressed upon the mind of the students, each student is required to carve a tooth of the several classes, as incisor, cuspid, bicuspid, and molar, in bone or artificial ivory, representing the actual form and size of the natural organ. Cavities are classified and illustrated by drawings and models, followed by their preparation and filling in technic forms by the student. Treating and filling root canals is given full attention, the students performing operations of this kind upon natural teeth mounted for the purpose.

All work, in its relation to operative dentistry, is given the necessary consideration to fit the student for meeting, as far as possible, the actual requirements of the infirmary.

RADIOGRAPHY

ROBERT LLOYD ELLER, D.D.S.....Instructor

Elementary principles of Radiography. Technic involved in special dental radiography. When and where the radiograph is indicated in the dental practice. The reading of dental radiographs. Stereopticon lectures on a collection of dental radiographs.

COMPARATIVE DENTAL ANATOMY

The senior students will study in this course the food habits and the teeth of animals. The forms of teeth and their uses as weapons of offense and defense will be studied.

CROWN AND BRIDGE-WORK, GOLD INLAY, AND PORCELAIN

JAMES WALTER BERNHARD, D.DS.....Associate Professor
EDWARD EARL GOLDEN, D.D.S.....Instructor
HENRY MERLE SPILLAN, D.D.S.....Instructor

Instruction in this course is systematically given by lectures and clinics. The course in technic extends through the Freshman, Junior, and Senior years.

Students are taught the principles and practice of inlay work, porcelain crowns, high and low fusing bodies, the use of the electric and gas furnaces.

METALLURGY

JOHN ROBERT DEFARGES, D.D.S.....Associate Professor

The subject of Metallurgy taught in the chemical laboratory will be reviewed and an extended course will be given in metals, alloys, and amalgams which are used in dentistry.

PROFESSIONAL ETHICS, DENTAL JURISPRUDENCE, AND ECONOMICS

These lectures on ethics consist of a brief statement of the moral obligations of professional men to each other and to their patients, the duty of upholding the honor and dignity of the profession, and the differences between the profession and business or manufacturing pursuits.

The lectures on jurisprudence will follow the text-book, which fully elucidates the legal relation of the dentist to his patients, the importance of dental records, the limitations of dental practice, the liabilities incurred by those who administer anaesthetics, the penalties, etc.

Economics.—This course will instruct the student in the proper methods to insure a practice and to retain patients; will discuss business relations between patients and dentist, fees, book and card systems, and the general economy in conducting an office.

ORAL PROPHYLAXIS

GEORGE MILLER SHARP, D.D.S.....Professor

This subject will be taught didactically, and clinically practical work by the students in the treatment of the oral cavity will be required.

DISEASES OF THE ORAL CAVITY MANIFESTED SYSTEMICALLY

MILLARD FILLMORE THOMPSON, M.D.....Professor

In this course of lectures the object will be to acquaint the student with primary pathological conditions of the mouth and their remote manifestation in the general system; also the systemic diseases which directly affect the oral cavity.

THE DENTAL INFIRMARY

CHARLES TURK BASSETT, D.D.S.....Associate Professor in Charge
EUGENE ROGERS STONE, D.D.S.....Demonstrator
SAMUEL DANEMANN, D.D.S.....Demonstrator
RICHARD KNIGHT THOMPSON, D.D.S.....Demonstrator
EDWIN ROSS TILLEY, D.D.S.....Demonstrator

The Infirmary is open every week-day the entire year. An abundance of clinical material is readily available. In fact, as many patients present themselves as can possibly be attended to by the students. It is under the immediate supervision of the demonstrator in charge, who is present from 1.30 until 5 o'clock.

TEXT-BOOKS AND WORKS OF REFERENCE

(The works first named and in *italics* are preferred)

Anatomy.—Cunningham's *Text-book of Anatomy;* Cunningham's *Manual of Practical Anatomy;* Black's Dental Anatomy.

Physiology.—Text-books: Haliburton's Physiology; Howell's Physiology; Tigerstedt's Physiology.

Pathology and Bacteriology.—Delafield and Prudden's Pathology; Jordan's Bacteriology.

Chemistry.—Simon's *Chemistry;* Barha's *College Chemistry;* Holland's *Medical Chemistry.*

Materia Medica.—H. C. Wood's *Therapeutics;* Hare's Practical Therapeutics; A. A. Stevens' Modern Materia Medica and Therapeutics; Culbreath's Materia Medica and Pharmacy; National Dispensatory Reference Text-books, Osborne, Wilcox, Sollmann, Shoemaker, U. S. Pharmacopoeia and National Formulary; Prinz's Dental Materia Medica and Therapeutics; Modern Dental Materia Medica; Buckley's Therapeutics and Pharmacology; Dorland's Medical Dictionary.

Prosthetic Dentistry.—The American Text-Book of Prosthetic Dentistry; Wilson's Prosthetic Dentistry; Hodgen's Dental Metallurgy. Horestadt's Principles and Technique of Crown and Bridge.

Operative Dentistry.—Kirk's Operative Dentistry; Black's Principles of Practice; Tome's Dental Anatomy and Surgery; Taft's Operative Dentistry; Litch's American System of Dentistry; Johnson's Operative Dentistry.

Oral Surgery.—Blair's Surgery and Diseases of the Mouth and Jaws; Scudder's Tumors of the Jaws; White's Exodontia; DeWitt's Anaesthetics.

Histology.—Nichols, Bohm and Davidoff's Histology; Bromell's Anatomy and Histology of the Mouth.

Orthodontia.—Dewey's Practical Orthodontia; Angle's Treatment of Malocclusion of the Teeth and Fractures of the Maxillæ; Talbot's Irregularities of the Teeth; Jackson's Orthodontia.

Dental Jurisprudence.—Rehfuss's Dental Jurisprudence; Noyes's Ethics and Jurisprudence for Dentists.

Dental Pathology and Therapeutics.—Burchard's Dental Pathology and Therapeutics.

Comparative Dental Anatomy.—Thompson's Comparative Dental Anatomy.

GRADUATION

Candidates for graduation must have attended three full courses of lectures, each of eight months' duration, and three courses of clinical instruction in this School, during the regular winter term and in separate years. Students are examined at the end of the regular course upon all subjects taught them during that course. Should the student fail in his examination in course, he may be re-examined in the fall. All fees must be paid and Infirmary requirements complied with before the student may present himself for examination.

Students must enter before, or within ten days after, the opening lecture of the regular course. They may register at any time during the Infirmary course, and thus begin Infirmary practice at once upon payment of twenty-five dollars, which amount will be deducted from their tuition fees for the succeeding regular term.

The candidate for graduation must be examined upon all subjects taught in this School, and before the examination he must perform operations upon the natural organs in the Infirmary, and present the demonstrators in charge with a well-constructed specimen of dental mechanism made by himself in the dental laboratory of the University.

In addition to the above requirements, the moral character and habits of the candidate, his industry, and diligent attendance will be taken into consideration. Notable negligence, immorality, or habitual absence from the lectures may preclude the candidate from attaining his degree, even though he may have acquired sufficient technical knowledge to pass a creditable examination. This reservation on the part of the Faculty of the right to make good moral character a prerequisite for graduation must not be overlooked.

The student also, during and between the sessions, must comply with the State laws regulating the practice of Dentistry, and act in accordance with the recognized code of ethics of the dental profession.

COURSES IN ARTS AND SCIENCES

Students taking a full course for a degree may be admitted without additional fee, except laboratory fees, to courses for which they are qualified, in the Department of Arts and Sciences, the aggregate of such courses not to exceed six hours a week.

LOCATION

The Dental Building is No. 1325 H Street N. W. It is within half a square of all lines of street cars going to every part of the city.

The Dean may be seen personally at 724 9th Street N. W., on any week day, and also at the Dental Building, 1325 H Street N. W., on Tuesday and Thursday of each week at 4.30 p.m. during the session.

FEES AND CONTINGENT EXPENSES

1. Matriculation fee (payable once)	$5
2. Annual library fee	2
3. Tuition fee per annum, including all charges for materials	125
4. Fee for graduation	10
5. Fee for a certificate under the seal of the University	2
6. A deposit of $10 to cover breakage in laboratory courses and damage to the building or apparatus is required. Any unforfeited balance is returned to the student.	

No registration will be accepted for less than a full half year, and no change in the courses undertaken at the time of registration will be made unless approved by the Dean. *Withdrawals during the semester will be granted only on recommendation of the Dean and the approval of the President.*

Students are furnished microscopes at the following rates:

Microscope for histological laboratory use	$5
Microscope for bacteriological, pathological, and clinical microscopy laboratory use	6

The cost of instruments for the first year amounts to about $30, and the cost of text-books to about $20.

PAYMENT OF FEES

Matriculation, library, other special fees and laboratory deposits are due in full in advance. Tuition and laboratory material fees may be paid in eight monthly instalments in advance. Students who are unable to pay their fees monthly in advance will be required to file an acceptable personal or corporate bond for $200 as security for future payment. In every instance all indebtedness must be discharged on or before May 1 of the current academic year. Fees are payable at the office of the Treasurer, 2024 G Street, or at the office of the Medical School, 1325 H Street.

BOARD AND ROOMS

A register of boarding-houses is kept by the Treasurer. Accommodations cost from $25 to $40 a month.

For catalogues, application blanks and further information, address

J. ROLAND WALTON, D.D.S., *Dean*,
724 9th Street N. W.

LAW SCHOOL

FACULTY

CHARLES HERBERT STOCKTON, LL.D.....President of the University
EVERETT FRASER, A.B., LL.B.....Dean and Professor of Law
WALTER COLLINS CLEPHANE, LL.M.....Professor of Law
EDWIN CHARLES BRANDENBURG, LL.M.....Professor of Law
ARTHUR PETER, LL.B.....Professor of Law
JOHN PAUL EARNEST, A.M., LL.M.....Professor of Law
WENDELL PHILLIPS STAFFORD, A.M., LL.D.....Professor of Law
JOHN WILMER LATIMER, LL.B.....Professor of Law
*MERTON LEROY FERSON, A.M., LL.B.....Professor of Law
ARCHIBALD KING, A.M., LL.B.....Assistant Professor of Law
JAMES LEWIS PARKS, Jr., A.B., LL.B.....Assistant Professor of Law
ERNST OTTO SCHREIBER, Jr., A.B., LL.B...Assistant Professor of Law
JUDSON ADAMS CRANE, A.B., LL.B., S.J.D., Assistant Professor of Law
WILLIAM CABELL VAN VLECK, A.B., LL.B.,
Secretary of the Law School and Instructor in Law
LOYD HALL SUTTON, S.B., LL.B.....Instructor in Patent Law
GEORGE WILLIAM RAMSEY, LL.B.....Instructor in Patent Law
WILLIAM RUFUS KING, LL.B.,
Lecturer on Law of Mining and Irrigation
ALFRED GEISES BUHRMAN.....Clerk of the Moot Court

MOOT COURT OF APPEALS

JOHN B. LARNER, LL.D.....Chief Justice
HENRY BROWN FLOYD MACFARLAND.....Associate Justice
STANTON JUDKINS PEELE, LL.D.....Associate Justice

LIBRARY

BLANCH BIRD.....Assistant Librarian
HAROLD KEATS, A.B.....Assistant Librarian

GENERAL STATEMENT

History.—The Law School, established in 1865, is the oldest in the city of Washington. Its course of instruction for the degree of Bachelor of Laws originally requiring two years was increased in 1898 to three years. A year of graduate work was added in 1877 leading to the degree of Master of Laws. The curriculum has since been increased by a course of study leading to the degree of Master of Patent Law.

Member of Association of American Law Schools.—The Law School was one of the group of law schools which in 1900 organized the Association

*On leave of absence 1915–16.

of American Law Schools and it has remained a member of the Association since that time. This Association includes forty-seven of the most progressive law schools of the country and is committed to the policy of advancement in legal education. As this school maintains the standards of the Association, work certified by it is given a maximum of credit by other law schools of the country. This enables students who are unable to complete their studies in Washington, to continue them at other institutions with a minimum loss of time and work.

Purpose of course.—The School aims to give a thorough legal training to students whose education and maturity fit them to pursue serious professional study. Over sixty per cent of its students have had college training and their average age is over twenty-five years. A preliminary course in liberal arts is encouraged and the University permits the first year of law work to be counted as the fourth year of college work for the degree of Bachelor of Arts, thus enabling students to obtain both the academic and professional degrees in six years.

Method of Instruction.—The method of instruction followed is designed to instill correct modes of legal study, to train the mind in legal reasoning and to give a thorough grasp of fundamental legal principles. The student studies leading cases—the earlier cases which establish a principle, the later cases which show its qualifications. This study is supplemented by classroom discussion and instruction. Thus while the student is being trained to analyze and to discriminate, he at the same time masters the principles of law, sees the reasons on which they are based, and observes the influence on their development of successive, political, economic and social theories. The method is most practical. The student has always before him actual problems and their solution by the ablest judges of England and America. He begins under his teacher's guidance the work he must do when he enters practice. In no other way can the future lawyer acquire such power to solve the new problems arising from the rapidly changing social and economic conditions of life. The case method is now used in over eighty per cent of the schools in the Association of American Law Schools. It is highly praised in a report submitted by Dr. Joseph Redlich, Professor of Law in the University of Vienna, who in 1913–14 investigated the various methods used in the law schools of the United States at the request of the Carnegie Foundation for the Advancement of Teaching.

The substantive law is taught almost wholly by professional teachers employing the case method and giving all their time to the school; the practice courses are conducted by lawyers and judges in active practice.

Scope of course.—The course of study is not local in its scope but constitutes a thorough preparation for the practice of law in any English speaking jurisdiction. It satisfies the professional study required for admission to the Bar examinations of the District of Columbia and all other jurisdictions of the United States. The school has conferred over 2,500 degrees, and its graduates are now practicing in every state of the Union.

ADVANTAGES OF WASHINGTON FOR THE STUDY OF LAW

The city of Washington has unusual attractions for students and particularly for students of law. It lies between the North and the South. It is a residential city of rare beauty, and its population is drawn from all over the United States. The library facilities of the city, both general and legal, are unexcelled. It is unique in the extent of its legal machinery. It is the seat of Congress, the Supreme Court of the United States, the Department of Justice, the United States Court of Claims, the United States Court of Customs Appeals, and of the District of Columbia Court of Appeals, Supreme Court and Municipal Courts, which exercise the dual function of state and federal courts. By attending the sessions of these various bodies students can familiarize themselves with all branches of legal procedure and keep in touch with current legal thought while pursuing their studies.

LOCATION

The Law School occupies the entire fifth and sixth floors of the New Masonic Temple, corner of New York Avenue, Thirteenth and H streets N. W., and is easily accessible from all parts of the city. The quarters are well equipped with commodious class rooms, moot court rooms, offices, the law library, and a students room.

LIBRARY

A well-equipped working library comprising 7063 volumes, is open to students from 8.30 a.m. to 10 p.m. Competent librarians are in charge and will give students assistance in the use of books.

The library contains the complete decisions of the highest courts of forty-three states and the District of Columbia, the complete reports of the United States Supreme Court and the other federal courts, the complete National Reporter Reports, the Century, Decennial, Key number and United States Supreme Court Digests, the various encyclopedias of law, the Lawyers Reports Annotated, the American Decisions, American Reports and American State Reports, the English Common Law and Chancery Reports, the English Reprint, the English Law Reports and Law Journal Reports since 1865 and about 800 standard text books and legal periodicals.

In addition to these facilities the students have free access to the Congressional Library and other public libraries.

ACADEMIC YEAR AND REGISTRATION

The academic year 1916–17 begins Wednesday, September 27, closes Wednesday, June 6. The year is divided into two half-years, the second beginning February 1. The course is so arranged that a student may enter the second half-year and be graduated three years from that time, receiving his degree at the Winter Convocation, held on or about February 22, of each year.

Students are urged to register at the beginning of the half-year. Those who register later than three weeks after the opening of the half-year, will be restricted to registration for such work only as in the opinion of the faculty they can successfully carry.

HOURS OF INSTRUCTION

The classes are divided into two sections, one meeting in the forenoon between 9 and 12; the other in the afternoon from 4.50 to 6.30. A complete course is available at either period. This enables students in Government or other employment to attend the law school during the day and to have their evenings for study. Classes in a few subjects are held in the morning from 7.50 to 8.40, and may be elected by students of the second and third years in place of subjects of the regular periods.

ADMISSION

I. *For the Degree of Bachelor of Laws.*—The requirements for admission to the course leading to the degree of Bachelor of Laws may be satisfied in either of the following ways:

a. By the presentation of a diploma or certificate of graduation from the classical, scientific or equivalent course of a college or university.

b. If the applicant for admission be under twenty-one years of age; by the presentation of certificates from a college or university showing the successful completion as a regular student of at least twelve year hours of college work. An applicant qualifying for admission under this requirement must be at least eighteen years of age.

c. If the applicant be twenty-one years of age or over; by the presentation of certificates from a university or college, or from an approved high school, or preparatory school, showing the successful completion of at least fifteen high school units, which are broadly equivalent to a four year high school course. A unit represents approximately one year of study of a major subject in a high school. Applicants presenting high school credits only should have them certified on the blank forms which they may obtain from the Secretary of the Law School.

The fifteen units may be made up from the following subjects: (The Roman numerals indicate the year of study in the subject).

Subjects	*Units*
English I, II, III, IV	4
Latin, Elementary, I, II	2
Advanced, III, IV	2
Greek, Elementary, I, II	2
Advanced, III	1
French, Elementary, I, II	2
Advanced, III, IV	2
German, Elementary, I, II	2
Advanced, III, IV	2

Subjects	*Units*
Spanish, Elementary, I, II	2
History, Ancient	1
Mediaeval and Modern European	1
English	1
American	1
Mathematics	
Algebra, Elementary	1
Advanced	½
Geometry, Plane	1
Solid	½
Plane Trigonometry	½
Science	
Physics	1
Chemistry	1
Physiography	1
Biology	1
Botany	½
Zoology	½
Political Economy	1
Civil Government	1
Commercial High School Subjects	
Accounting and Finance	1
Bookkeeping	1
Business Organization	1
Commercial Law	1
Commercial History	½
Commercial Geography	½
Government and Industrial Problems	1

2. *For the Degree of Master of Laws or Master of Patent Law.*—Candidates for these degrees must be at least twenty-one years of age and hold the degree of Bachelor of Laws from an institution substantially complying with the requirements of the Association of American Law Schools.

3. *As Special Students.*—Persons who can not qualify as candidates for a degree but are over twenty-one years of age and have had such educational training and practical experience as should enable them to pursue satisfactorily the study of law, may be admitted as special students by consent of the Dean.

ADVANCED STANDING

Students from other law schools which substantially comply with the requirements of the Association of American Law Schools will receive equivalent credit, not exceeding two years' work. Such students must have been qualified to enter this school when they began the study of law. The right is reserved to refuse such credit, in whole

or part, save conditionally or after examination, and credit given may be withdrawn for poor work.

Applicants of whom examination may be required, can take the regular examinations or those held at the beginning of each academic year. (See examinations.)

No credit will be given for studies pursued in a college or high school before entering on the regular study of law, or in a law office.

SUBJECTS OF INSTRUCTION 1916-17

The course of instruction extends through a period of at least three years. For the degree of Bachelor of Laws twelve hours class work a week are necessary to complete the course in three years. Ten hours a week for a year in subjects not counted towards the Bachelor's degree, are required for the degree of Master of Laws or Master of Patent Law.

The subjects marked with an asterisk are required for the degree of Bachelor of Laws. The student may elect the remainder of his subjects. Third-year students may elect subjects of the second year not previously studied. The selection of the subjects must be made in all cases within ten days after the beginning of the half-year.

Students devoting their whole time to the study of law may, with the permission of the Dean, take work not exceeding fifteen hours a week. Excess credits may be applied toward the degree of Master of Laws or Master of Patent Law. Students with substantial outside employment may not register for more than twelve hours and are urged to carry less, and to devote more than three years to the course.

FIRST YEAR SUBJECTS

*Common Law Actions. *One hour first half year.* Introductory to study of law. Substantive and adjective law; courts; steps in an action; original writ; scope of formed actions; growth of new actions; development of law. *Sunderland's Cases on Common Law Pleading.* Mr. Fraser.

*Contracts. *Three hours.* Simple contracts: offer, duration and termination thereof; acceptance; consideration; contracts under seal, including thereunder formalities of execution, delivery and consideration; parties affected by contracts: beneficiaries; assignees; joint obligors and obligees; performance of contracts: express and implied conditions; impossibility. *Williston's Cases on Contracts.* Mr. Ferson.

Criminal Law and Procedure. *Three hours second half year.* Sources of the criminal law; intent and act; attempts; insanity as a defense; historical development of crimes and statutory changes. The arrest; bail; the grand jury; the indictment; trial; pleas; modification of

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* Required Subjects.

early practice, and statutory changes. *Mikell's Cases on Criminal Law. Clark's Criminal Procedure and selected cases.* Mr. Earnest.

*Equity I. *Two hours second half year.* The nature and underlying principles of equity; specific performance of affirmative and negative contracts; relief for and against third persons under contracts, especially under contracts relating to the use of land. *Ames' Cases on Equity Jurisdiction, Volume I.* Mr. Parks.

*Personal Property. *Three hours first half year.* Distinction between personal and real property; nature of and rights based upon possession; some methods of acquiring title to chattels; liens and pledges; conversion. *Warren's Cases on Property.* Mr. Van Vleck.

Principles of Legal Liability. *Three hours first half year.* Nature of an act; causation of injury; proximity or remoteness of injury as affecting tort or criminal liability of the actor; effect of interposition of other causes including natural forces and acts of animals and human beings; excuses for acts causing injury including duty, public authority, defence of person and property and consent of injured person. *Beale's Cases on Legal Liability.* Mr. Crane.

*Real Property I. *Two hours second half year.* Feudal tenure and incidents; estates in land; co-tenancy; future interests; seisin; creating and transferring estates; uses; incidents of ownership. *Warren's Cases on Property.* Mr. Fraser.

*Torts. *Two hours.* Negligence; duty of care of occupant of land toward those coming on it; trespass to the person, to real and personal property; contributory negligence; liability for fire or explosives; liability of owner of animals; deceit; libel and slander; malicious prosecution; unfair competition; strikes and lock-outs. *Ames and Smith's Cases on Torts, Volume I (third edition); Volume II (second edition).* Mr. King.

SECOND YEAR SUBJECTS

Administrative Law. *Two hours half year.* Not given 1916–17 and in alternate years thereafter.

Agency. *Three hours first half year.* Requisites for creation of the agency relation; power of the agent to subject the principal to tort, criminal and contract liability to third persons; responsibility of the agent to third persons; liabilities in case of undisclosed principal; duties of principal and agent inter se; delegation of powers by the agent; ratification; termination of agency. *Wambaugh's Cases on Agency.* Mr. Ferson.

*Bills and Notes. *Two hours second half year.* Form and essential requisites of negotiable instruments; delivery; indorsement; liability of maker, acceptor, drawer, indorser, and of person transferring by delivery. *Case book to be announced.* Mr. King.

*Required Subjects.

*Common Law Pleading. *Two hours second half year.* The declaration, necessary allegations, separate counts, joinder of causes; pleas, the common traverse, the special traverse, the general issues, confession and avoidance, estoppel, abatement; replications; amendment, aider and repleader. *Sunderland's Cases on Common Law Pleading.* Mr. Fraser.

Damages. *Two hours half year.* Not given in 1916–17 and in alternate years thereafter.

Domestic Relations. *Two hours second half year.* Marriage, divorce and separation; personal and property rights and liabilities of husband and wife; parent and child; infancy. *Woodruff's Cases on Domestic Relations (second edition).* Mr. Van Vleck.

*Equity II. *Two hours first half year.* A continuation of the study of the rules regulating specific performance of contracts including the doctrine of equitable conversion, and the more important defenses to a specific performance such as the statute of frauds, fraud, hardship, misrepresentation and concealment. *Ames' Cases on Equity Jurisdiction, Volume I.* Mr. Parks.

Equity III. *Two hours second half year.* Bills of interpleader; bills of peace; bills Quia Timet; cloud on title; reformation and rescission; mistake of law and mistake of fact. *Ames' Cases on Equity Jurisdiction, Volume II.* Justice Stafford.

Equity Pleading and Practice. *One hour second half year.* Parties; process; bills; demurrers; answers; pleas; disclaimers; cross-bills; replications; amendments; practice; injunctions; receivers. *Rush on Equity Pleading and Practice, Rush's Cases on Equity Pleading and Practice.* Mr. Clephane.

*Evidence. *Three hours first half year.* Judicial notice; burden of proof and presumptions; admissions and confessions; character; opinion evidence; the hearsay rule and its exceptions; the privileges and disqualificatious of witnesses; the examination of witnesses; writings. *McKelvey on Evidence, Thayer's Cases on Evidence.* Mr. Peter.

Insurance. *Two hours half year.* Not given 1916–17 and in alternate years thereafter.

Legal Bibliography and Brief Making. *One hour second half year.* Where and how to find the law; how to use decisions and statutes; trial brief; appeal brief. Judge Latimer.

Mortgages. *Two hours half year.* Not given 1916–17 and in alternate years thereafter.

Municipal Corporations. *Two hours first half year.* The nature and constitution of municipal corporation; its powers including legislation, taxation, contracts, expenditures, police power, acquisition and management of property; its liabilities in contract and tort; remedies

* Required Subjects.

against a municipal corporation. *Beale's Cases on Municipal Corporations.* MR. CRANE.

PARTNERSHIP. *Two hours first half year.* Formation; title to partnership property; partnership liability; rights and duties of partners inter se; rights and remedies of creditors. *Case book to be announced.* JUSTICE STAFFORD.

PUBLIC SERVICE COMPANIES, AND THE INTERSTATE COMMERCE ACT. *Two hours.* An introductory consideration of the rights, liabilities and duties of public service companies in general, followed by a more minute study of the duties and obligations of carriers including those of interstate carriers as regulated by the Interstate Commerce Act. *Case books to be announced.* MR. PARKS.

QUASI-CONTRACTS. *Two hours second half year.* Obligations imposed by law which are enforcible by action of assumpsit. Case book to be announced. MR. VAN VLECK.

*REAL PROPERTY II. *Two hours.* Accretion; adverse possession; prescription; conveyancing; covenants for title; estoppel; profits; easements; licenses; covenants running with the land; landlord and tenant. *Gray's Cases on Property (second edition), Volume III and Warren's Cases on Property.* MR. FRASER.

SALES. *Three hours second half year.* Subject matter of a sale of personal property; the passing of title as affected by the goods being specified or unspecified, the contract being executed or executory, the use of documents of title, and shipments c.o.d.; effect of fraud and of retention of possession; rights and remedies of the seller; rights and remedies of the buyer. *Williston's Cases on Sales (second edition).* MR. CRANE.

THIRD YEAR SUBJECTS

BANKRUPTCY. *One hour second half year.* History of the law; jurisdiction and procedure in Courts of Bankruptcy and before Referees; effect upon civil litigation of bankruptcy proceedings; voidable preferences; jurisdiction over appeals, etc. MR. BRANDENBURG.

CONFLICT OF LAWS. *Two hours.* Jurisdiction; of law over persons and things; of courts, in rem, in personam, quasi in rem, and for divorce; creation and enforcement of foreign rights; limitations and enforcement of such rights; remedies, including rights of action and procedure; particular classes of rights, including personal rights, property rights, tort rights, contract rights; administration of estates. *Lorenzen's Cases on Conflict of Laws.* MR. CRANE.

CONSTITUTIONAL LAW. *Two hours.* Legislative, executive and judicial powers; the relation of nation and states; District of Columbia and territories; the contract clause; ex post facto laws; fourteenth

*Required Subjects.

amendment; commerce clause, etc. *Wambaugh's Cases on Constitutional Law.* MR. KING.

*CORPORATIONS. *Two hours.* The course aims to deal with all general principles of corporation law including the corporation's relations with the state, its promotors, its stockholders, and its creditors and the rights and obligations arising therefrom. *Case book to be announced.* MR. PARKS.

FEDERAL PROCEDURE. *One hour first half year.* Source of Federal jurisdiction; the law as administered by Federal Courts; jurisdiction and procedure; appellate jurisdiction of Circuit Court of Appeals and Supreme Court of the United States; practice in Court of Claims, and other Federal Courts. MR. BRANDENBURG.

LEGAL PROCEDURE AND ETHICS. *One hour first half year.* Duties of attorneys; ethics; office practice; common law practice; summary judgments; attachments; examination of witnesses; appellate practice; extraordinary legal remedies. MR. CLEPHANE.

*MOOT COURT. *Two hours.* Pleadings; trials before judge; trials before jury; extraordinary remedies; appellate work. There are three nisi prius courts, Equity, Circuit, and Criminal, and a Court of Appeals. The proceedings are conducted as in a regular court. Statements of fact are furnished the students who must determine the court in which to sue, frame their pleadings, and conduct the cases to a conclusion in accordance with the rules of actual practice. MESSRS. CLEPHANE, EARNEST AND JUDGE LATIMER.

ORGANIZATION AND MANAGEMENT OF CORPORATIONS. *One hour second half year.* Promotion; selecting domicile; capitalization; charter; by-laws; meetings; stockholders; directors; officers; stock; bonds; voting trusts. *Clephane on the Organization and Management of Corporations.* MR. CLEPHANE.

PATENT LAW (SUBSTANTIVE) AND PATENT OFFICE PRACTICE. *Two hours.* Substantive Patent Law: Subjects of patents; invention; anticipation; statutory bars; utility; parties; reissues; disclaimers; extent of monopoly; state and federal regulation; transfers of title; licenses; construing claims; infringement. Patent Office Practice: Attorneys; application papers; examinations; amendments; division; double patenting; interferences; interference practice; appeals; abandonment; renewals; public use proceedings; issue. MR. SUTTON.

PATENT LAW PRACTICE. *Two hours.* History of Procedure; courts; suits in general; infringement suits, in law, in equity; preparation to file bill; essentials of bill; defenses, by answer, by motion to dismiss; interrogatories and discovery; trial, old rules, new rules; restraining orders, injunction; decrees; profits and damages; appellate procedure. The second half of year is devoted to the trial of patent cases. (*Students taking this subject are excused from the second half year in Moot Court.*) MR. RAMSEY.

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* Required Subjects.

PREPARATION OF LEGAL INSTRUMENTS. *One hour first half year.* Contracts; deeds; acknowledgment and proof of deeds; mortgages and deeds of trust; leases; bills of sale; chattel mortgages; release of mortgages or deeds of trust; powers of attorney; assignments; wills. JUDGE LATIMER.

REAL PROPERTY III. *Three hours first half year.* Conditional estates; future interests; reversion and remainders; the Rule in Shelley's Case; future uses; executory devises; determination of classes; powers; the rule against perpetuities. *Gray's Cases on Property (second edition) Volume V.* MR. FRASER.

SURETYSHIP. *Two hours first half year.* Nature of the contract; kinds of suretyship; the statute of frauds; surety's defenses based on the absence, suspension or discharge of the primary obligation, or on conduct of the creditor prejudicial to the surety-rights; effect of notice of revocation by or death of the surety; subrogation; exoneration. *Ames' Cases on Suretyship.* MR. KING.

TRUSTS. *Three hours second half year.* The nature of a trust as distinguished from debt, bailment, equitable charge and executorship; the requisites for the creation of a trust including trustee, cestui que trust, object, consideration and the effect of the Statute of Frauds; the nature of the cestui's interest; the transfer of trust property by act of the parties, by death, by marriage, by insolvency and acts of creditors; the duties of the trustee in the administration of his trust. *Ames' Cases on Trusts.* MR. FERSON.

WILLS AND ADMINISTRATION. *One hour first half year.* History of wills; the right to make a will; what is disposable under a will; form, execution and attestation; revocation; who is entitled to administer upon an estate; distribution of an intestate's personalty; descent of realty; probate; letters of testamentary and of administration; duties of executors and administrators. MR. PETER.

LEGAL AID SOCIETY

The Legal Aid Society of the Law School is a student organization which gives legal advice without charge to persons financially unable to employ a lawyer. The members secure valuable practical experience which supplements their work in Moot Court. Membership is restricted to senior and post-graduate students of high scholarship. The work of the Society is supervised by a member of the faculty and an alumnus in active practice.

PUBLIC SPEAKING AND DEBATING

Excellent facilities for training in public speaking and parliamentary law are afforded by the Columbian Debating Society, which has been organized in the Law School, and meets weekly for debate. Mem-

bership in this Society is optional, but its work is encouraged by the Faculty, and students are advised to take part in its exercises.

Intercollegiate debates are also held. Membership on the teams which represent the University in these contests must be won in preliminary contests held for such purpose. These debates are conducted under the supervision of a committee of the University Faculty.

ATTENDANCE, RECITATIONS, EXAMINATIONS, GRADES AND ELIMINATION OF STUDENTS

Attendance and Recitations.—No student except by special permission of the Dean, will be allowed to take an examination in any subject unless he shall be regularly registered and have been in regular attendance upon the classes and have done all the work required in the course of instruction upon that subject. A student who is absent over ten per cent of the class hours in any subject will be barred from examination unless his absences are excused by the Dean.

Regular Examinations.—Written examinations are held at the close of the first half-year in subjects which are then completed and at the close of the year in all other subjects. All students are required to take the regular examinations in the subjects pursued, unless excused by the Dean.

Grades.—At all examinations the grading of students will be indicated by the letters A, B, C, D, E, and F, representing respectively Excellent, Good, Satisfactory, Fair, Conditioned and Failed. A student receiving the grade of F (failed) in any subject will be required to repeat the class work. A student receiving the grade of E (conditioned) in any subject will be required to repeat the class work unless he pass the next regular examination for the removal of conditions with a grade of at least C.

Examinations for the Removal of Conditions.—Regular examinations for the removal of conditions are held during the first week of each academic year. A special examination for the removal of conditions is held at the end of each academic year for the benefit of candidates for the Bachelor's degree who have been conditioned in not more than four hours during the first half of their last year. Application for permission to take these examinations must be made in writing to the Secretary of the Law School not later than three days before the date for which the examination is scheduled.

Elimination of Students.—Students, regular or special, whose work is unsatisfactory are required to withdraw from the school. The instructors of the first year class are a committee to examine the students' records, with power to warn, to place on probation, and to refuse reregistration to any student whose work is deemed unsatisfactory. This committee examines the records of all students immediately after the mid-year examinations and again after the final examinations.

DEGREES

1. *Bachelor of Laws.*—The degree of Bachelor of Laws will be conferred upon regular students who have studied law for a period of at least three years and passed satisfactory examinations on required and elective subjects aggregating thirty-six year hours, and whose attendance and conduct have been satisfactory to the Faculty.

The degree of Bachelor of Laws with distinction will be awarded to students whose average percentage in all subjects is equivalent to the grade of A.

2. *Master of Laws.*—The degree of Master of Laws will be conferred upon students who have completed the work in subjects not counted for the Bachelor of Laws degree covering a minimum of ten hours a week with a grade of C or better and whose attendance and conduct have been satisfactory to the Faculty. The subject of International Law offered by the Faculty of Arts and Sciences may be counted towards this degree. The degree will not be conferred until one year after the receipt of the degree of Bachelor of Laws.

3. *Master of Patent Law.*—Students who have qualified for the degree of Master of Laws may elect instead the degree of Master of Patent Law provided that they have included in their course the subjects of Substantive Patent Law, Patent Law Practice and Federal Procedure. This degree will not be conferred until one year after receipt of the degree of Bachelor of Laws.

Combination Six-years Course for Degrees of Bachelor of Arts and Bachelor of Laws

The University permits one year of professional work in the Law School to be counted towards an academic degree. The degree of Bachelor of Arts will be conferred on students who have completed three years of college work (45 units) including one of the four groups of subjects prescribed by Columbian College of the University, and the first year in the Law School; the degree of Bachelor of Laws on completing the whole six years of the combination course.

PRIZES

The John B. Larner Gold Medal.—A gold medal offered by Mr. John Bell Larner, Chairman of the Board of Trustees of the University, is awarded annually to that member of the graduating class who shall have attained the highest average grade in the entire course for the degree of Bachelor of Laws. Awarded 1915–16 to John Montieth McFall.

American Law Book Company Prize. A prize offered by The American Law Book Company of a complete set of "Cyc" with its annual annotations to date, is awarded annually to that member of the graduating class who shall have attained the highest average grade in the entire course for the degree of Bachelor of Laws. The recipient of

this prize is also eligible to compete for one of three Corpus Juris scholarships, each of a value of $500, for one year's post graduate work in law, offered by The American Law Book Company.

Blackstone Institute Prize.—A prize offered by the Blackstone Institute of a set of Modern American Law is awarded annually to that member of the graduating class excepting the winner of The American Law Book Company Prize, who shall have attained the highest average grade in the entire work of the third year. Awarded 1915–16 to John Montieth McFall.

The Ordronaux Prize Scholarship.—A prize scholarship, known as "The Ordronaux Prize Scholarship," is awarded annually to that member of the second year class taking the regular course who shall have attained the highest average grade in the work of the second year. The recipient of this prize will be entitled to receive credit for tuition fees to the extent of ten hours work in his third year; library and diploma fees will remain payable. The award of this scholarship is purely personal and will not be commuted to a cash payment. The recipient of the scholarship must make use of it during the session next succeeding its award; otherwise it will be awarded to the person having the next highest grade. Awarded 1915–16 to Will Reeves Gregg.

Phi Delta Phi Prize.—The Marshall Chapter of Phi Delta Phi Fraternity, which is the local chapter, offers a prize of twenty-five dollars cash, to be awarded annually to that member of the first year class taking the regular course who shall attain the highest average grade in the entire work of the year. Awarded in 1915–16 to Charles Orr Marshall.

Ellsworth Prize.—A prize of twenty-five dollars in gold, offered by Mr. Fritz von Briesen, called the "Ellsworth Prize," is awarded for the best work done by a student in the subject of Patent Law Practice. Awarded in 1915–16 to Charles E. Tullar.

John Byrne and Company Prize.—A prize offered by John Byrne and Company of Washington, D. C., of four volumes of their Legal Classics is awarded each year to the student attaining the highest grade in Real Property III. Awarded in 1915–16 to Kenneth Stanley Neal.

FEES

1. Matriculation fee (payable once)	$5
2. Library fee (payable annually one-half at the beginning of each half-year)	3
3. Tuition fee per annum for each hour taken per week	10
4. Fee for graduation	10

No registration will be accepted for less than a half-year, and no change in the courses undertaken at the time of registration will be made unless approved by the Dean. *Withdrawals during the half-year will be granted only on recommendation of the Dean and the approval of the President.*

PAYMENT OF FEES

Matriculation and library fees are due in advance. Tuition may be paid in eight monthly installments in advance, but will not be apportioned for part of a month. Students unable to pay their fees monthly in advance will be required to file an acceptable personal or corporate bond for $200 as security for future payment. In every instance all indebtedness must be discharged on or before May 1 of the current school year. Fees are payable at the office of the Treasurer of the University, 2024 G Street, or of the Secretary of the Law School.

ROOMS, BOARD AND GENERAL EXPENSES

The following table gives an estimate of the expenses for a year of thirty-six weeks.

	LOW	AVERAGE	HIGH
Tuition and library fee.....	$123.00	$123.00	$123.00
Room and board.....	200.00	250.00	300.00
Laundry.....	15.00	25.00	35.00
Text books and stationary.....	25.00	35.00	45.00
Totals.....	363.00	433.00	503.00

A register of boarding houses is kept by the Treasurer of the University.

STUDENTS' EMPLOYMENT BUREAU

The School conducts an Employment Bureau to assist students in finding work to aid in their support. Many out-of-town students take the United States Civil Service examinations in their various states and secure positions in the Government departments in Washington, where the hours of employment enable them to pursue the law course in the afternoon. Information concerning these examinations may be secured from the Civil Service Commission at Washington.

There are also opportunities for private employment which will help pay expenses, but the applicant must be on hand to take advantage of them. Prospective students should have the means of support for at least a half year to give them time to secure positions. The Bureau will assist prospective students but it is usually impossible to give definite aid until they come to the city.

For catalogues, application blanks and further information address

THE SECRETARY OF THE LAW SCHOOL,
George Washington University.

PART III

ASSOCIATED COLLEGES

NATIONAL COLLEGE OF PHARMACY
COLLEGE OF VETERINARY MEDICINE

Institutions in the District of Columbia organized as corporations under the Charter of the University, having separate financial foundations but educationally forming a part of the system of the University.

NATIONAL COLLEGE OF PHARMACY

OFFICERS AND TRUSTEES

President

CHARLES H. STOCKTON, LL.D.

Dean and Chairman

HENRY E. KALUSOWSKI

Vice-Chairman

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HENRY E. KALUSOWSKI, 1918
WILLIAM TURNER KERFOOT, 1918

FACULTY OF THE NATIONAL COLLEGE OF PHARMACY

CHARLES HERBERT STOCKTON, LL.D...PRESIDENT OF THE UNIVERSITY
HENRY E. KALUSOWSKI, M.D., Phar.D., Dean, and Professor of Pharmacy
HENRY HONEYMAN HAZEN, S.B., M.D.,
Professor of Materia Medica, Botany, and Toxicology
HERBERT HORACE BUNZELL, Ph.D.,
Professor of Chemistry and Physics
HOWARD MELVILLE BRADBURY, Phar.D.,
Professor of Analytical Chemistry
BURTON JAMES HOWARD, S.B.....Professor of Microscopy
HENRY BUSSEY FLOYD, Phar.D.....Professor of Mercantile Pharmacy
ALEXANDER MUNCASTER, Phar.D., LL.M.,
Professor of Pharmaceutical Jurisprudence
HENRY WARREN GEORGE, Phar.D.,
Assistant to the Professor of General Chemistry
HOMER KIRK BUTLER, Phar.D.,
Assistant to the Professor of Analytical Chemistry

CALENDAR

1916

September 14, *Thursday*—Admission Examination begins at 1 p.m. in the Lecture Room of the College.
September 20, *Wednesday*—Forty-fifth Session begins.
November 30, *Thursday*—Thanksgiving Day, a holiday.

Recess from December 21, 1916, to January 3, 1917

1917

February 22, *Tuesday*—A holiday.
May 7, *Monday*—Annual Examinations for promotion and graduation begin.
June 6, *Wednesday*—Commencement.

GENERAL STATEMENT

The National College of Pharmacy, the outgrowth of the Columbian Pharmaceutical Association, organized in April, 1871, chartered under the provisions of an act of Congress in 1872, opened its doors to students November 11 of that year. In February, 1906, it became a member of the educational system of George Washington University, under the charter of the University granted by Congress March 3, 1905, providing for the organization of colleges. The President of the University is *ex-officio* president of the National College of Pharmacy.

The work of the College embraces courses in chemistry, botany, physiology, materia medica and toxicology, pharmacy and pharmaceutical laboratory work, analytical chemistry, microscopy, mercantile pharmacy, and pharmaceutical jurisprudence. Three years are required for the completion of the prescribed course.

The College building is centrally located on I street northwest between Eighth and Ninth streets. It is easily reached by the principal street car lines of the city.

Preliminary Education and Examination

The College requires of its matriculants a knowledge of the branches usually taught in the public schools of Washington, D. C., to the extent of *four years in the high schools or its equivalent*, and they must be at least seventeen years of age. Evidence of this may be shown by certificates from reputable teachers or by the results of an examination to be held at the College, at one o'clock p.m., THURSDAY, September 14, 1916.

SPECIAL COURSES

Students may select one or more of the branches taught and attend the lectures and laboratory work during the time set apart for such study.

Students taking single tickets are not entitled to take the examinations for the degree conferred by the College.

THE DEGREE

The degree conferred is *Doctor of Pharmacy*.

QUALIFICATIONS FOR THE DEGREE

1. The student shall have attended three courses of instruction in Chemistry, Pharmacy, Analytical Chemistry, Materia Medica, Botany, Physiology, Toxicology; and two in Microscopy, the last of which must have been in this College; and one course each in Mercantile Pharmacy and Pharmaceutical Jurisprudence.
2. He must have passed a satisfactory examination in each of the branches taught.
3. He must be recommended by the Board of Examiners.

MATERIA MEDICA, BOTANY, PHYSIOLOGY AND TOXICOLOGY

Freshman Course

Introduction to the study of Botany, Evolution, Properties of Living organisms, Growth of Plants, Internal Structure and Physiology of plants will receive proper attention, followed by a description of the Natural and Artificial systems of Botany.

Following will be a course of instruction in Animal Physiology, to include Body Tissues, Bone, Fibre, Cartilage, Muscle, Epithelium, Serous Tissue, Nerve Tissue, Blood and the Circulation.

Junior Course

Causes of disease, Trauma, Poisons introduced from without, the Bacteria, Immunity.

General Principles of Therapeutics, Rules for Dosage, Standardization of Drugs, to be followed in their regular order, the study of Drugs, classified according to their general or local effects.

Senior Course

General review of the Junior year work and continuation of the study of drugs, to include the coal tar group, toxins and anti-toxins vaccines Bacterins. Use of drugs hypodermically. This course to conclude with a special course of instruction in Toxicology.

PHARMACY

Freshman Course

This course is given to the study of the various pharmaceutical processes and operations. Following in the order named are lectures on metrology, heat, thermometry, evaporation, distillation, fusion, sublimation, calcination, granulation, comminution, solution, filtration, clarification, decoloration, precipitation, crystallization, and extraction, during which the various methods used to bring about the desired results will be illustrated.

Junior Course

During a part of this course the time is given to the application of the processes considered during the Freshman year to pharmacopœial preparations, and such modifications as adapt them to special uses.

The latter part of this course is taken up with the study of official preparations obtained from the elementary bodies beginning with bromine, chlorine, iodine, phosphorus, and sulphur, following by carbon, boron, silicon, the inorganic acids, potassium, sodium, lithium, ammonium, magnesium, calcium, barium, zinc, aluminum, cerium, cadmium, manganese, iron, chromium, lead, silver, copper, mercury; antimony, arsenic, bismuth, and gold.

Senior Course

The time during this course is mainly given to the study of compounds chiefly derived from organic matter, and products obtained therefrom, amylaceous and saccharine substances; glucosides and alkaloids, volatile oils and animal products used in pharmacy, vegetable oils, soaps, and products from resins.

ANALYTICAL CHEMISTRY

The instruction in this Department is intended to present the chemical tests of the United States Pharmacopœia, with methods for the identification of substances and for the detection of impurities; to instruct in the methods of assaying and the use of volumetric solutions, and to enable students to analyze any ordinary mixture of inorganic material.

For the purpose of carrying out the work of this Department a large, well-equipped laboratory is provided with all the usual water and gas facilities, and has recently been wired and installed with electric apparatus whereby electro-chemical methods of analysis can be taught and the application of the electric current to the preparation of chemicals by the methods of electro-chemistry can be illustrated before the students. These and other facilities afford students exceptional opportunities to become familiar with the fundamental principles of the science of chemistry.

The first year is devoted to experimental work so arranged as to supplement the lectures in General Chemistry.

The second year covers a systematic course in qualitative analysis in connection with the test of the United States Pharmacopœia.

The third year is devoted to volumetric analysis by means of the standard solutions of the Pharmacopœia.

GENERAL CHEMISTRY AND PHYSICS

Inasmuch as the subjects of Analytical Chemistry and Pharmacy are fully provided for in other courses, these lectures are devoted more closely to the fundamental principles and classification which must

underlie a thorough and systematic knowledge of Chemistry. Owing to the intimate connection existing between Chemistry and several branches of Physics, a number of lectures illustrating the more important laws and principles of some of these branches precedes the regular course in Chemistry, and others on these subjects with which a prior acquaintance is less important follow after the student has acquired some knowledge of chemical changes. During the first half of the second year Physics and the non-metallic elements receive consideration, followed during the remainder of the second and a portion of the third year by the metals. The greater portion of the third year is devoted to the exposition of the more important facts, principles, and theories of Organic Chemistry.

MICROSCOPY

The course of Microscopy gives instruction in the use of the compound microscope as an aid in the study and identification of drugs, and requires full attendance from Junior and Senior students.

The work includes both lectures and laboratory courses, and consists in the examination of plant tissue as illustrated in various vegetable substances most familiar to pharmacists. Special attention is given to the structural characteristics by which one drug can be distinguished from another as well as to the detection and identification of the most common adulterants used.

MERCANTILE PHARMACY AND PHARMACEUTICAL JURISPRUDENCE

Attendance upon these courses is required from the Senior class only.

FEES

Matriculation	$5
Tickets for the full year's course of instruction, Freshman	80
Tickets for the full year's course of instruction, Junior	85
Tickets for the full year's course of instruction, Senior	90
Single tickets for Chemistry, Materia Medica, Botany, and Toxicology, each	20
Single tickets for Analytical Chemistry	25
Single tickets for Practical Pharmacy	25
Single tickets for Microscopy	20
Single tickets for Mercantile Pharmacy	10
Single tickets for Pharmaceutical Jurisprudence	10
Fee for Diploma	10

For further information consult the Dean, HENRY E KALUSOWSKI, 808 I Street N. W.

COLLEGE OF VETERINARY MEDICINE

BOARD OF TRUSTEES

John Albert Tiffin Hull — David Eastburn Buckingham, V.M.D.
Henry Rozier Dulany — John Lockwood, D.V.S.
William Corcoran Eustis — John Pollard Turner, V.M.D.

FACULTY

Charles Herbert Stockton, LL.D.....President of the University
David Eastburn Buckingham, V.M.D.....Dean,
Professor of Materia Medica, Therapeutics and Canine Practice
Charles Edward Munroe, Ph.D., LL.D.....Professor of Chemistry
John Lockwood, D.V.S.....Professor of Veterinary Surgery
John Pollard Turner, V.M.D.,
Professor of Theory and Practice of Veterinary Medicine
Oscar Benwood Hunter, M.D., Professor of Histology and Embryology
Samuel Sutherland Buckley, M.S., D.V.S.,
Professor of Special Pathology, and Infectious Diseases
Frank Adelbert Hornaday, S.B., M.D.,
Professor of Physiological Chemistry
Marcus Ward Lyon, Jr., M.D., Ph.D.,
Professor of Bacteriology and Pathology
Otis Dow Swett, S.M., LL.M., ...Assistant Professor of Chemistry
Ernest Neal Cory, M.S.,
Assistant Professor of Zoölogy and Parasitology
Tunis Hicks, D.V.M.....Assistant Professor of Veterinary Anatomy
Henry Ignacius Quinn, LL.M...Lecturer on Veterinary Jurisprudence
Chauncey Merle Grubb, D.V.M.,
Instructor in Dairy Inspection, Hygiene and Obstetrics
Harry Aloysius Lochboehler, D.V.M.,
Instructor in Veterinary Materia Medica and Therapeutics
Arthur Alexander Eisenberg, A.B., M.D...Instructor in Physiology
John James Essex, D.V.M...Instructor in Horseshoeing and Dentistry
Louis V. Dieter, Phar.G.....Instructor in Pharmacy and Botany
Harry Thomas Clayton, D.V.M.....Instructor in Anatomy
Morris Wooden, Ph.B., D.V.S.....Instructor in Meat Inspection
David McMaster, M.D., D.V.S....Instructor in Breeds and Breeding
Ralph Gongwer, B.Sc. in Agric.....Instructor in Feeds and Feeding

REQUIREMENTS FOR ADMISSION

Students presenting a diploma from any recognized college, normal or high school are eligible to admission without examination.

Students not having the above qualifications will be required to submit to an examination equivalent to the 1st grade civil service examination as published in the Civil Service Manual of Examinations.

ADMISSION OF STUDENTS FROM OTHER SCHOOLS

Students of other recognized and approved veterinary schools may be admitted to this school as follows:

Those qualified to enter the second year of such a school may be admitted to the second year of this school, those qualified to enter the third year of such a school to the third year of this school; those qualified to enter the fourth year of such a school to the fourth year class of this school; provided, however, that the subjects pursued by the applicants in their previous year or years are reasonably equivalent to those required in the same year or years in this school, and that the requirements for advancement from class to class are the equivalent of those in this school. Applicants may be required to submit to examination in all the subjects pursued by the previous class of this school.

EVIDENCE OF ATTENDANCE

At the end of the college year each student is entitled to a written statement giving the length of time spent in each study during the session and the grade received therein. This statement, or definite evidence of credit, shall be exacted from a student before he is given advanced standing in any veterinary college.

ADVANCED STANDING

Advanced standing will be given for degrees in Medicine, Dentistry, or Veterinary Medicine.

Students holding degrees in Arts, Science, Philosophy, or Agriculture who in the course of study for their degrees have pursued studies in chemistry, physiology, anatomy, histology, bacteriology, or pathology, equivalent to the courses in these subjects in this college, may upon satisfactory evidence of their proficiency be credited with such studies; provided, however, that such students shall devote two years' study in veterinary medicine, the last year of which is passed in this College.

SPECIAL STUDENTS

Students, approved by the Dean, not candidates for the degree of Doctor of Veterinary Medicine, may be admitted without examination to pursue any course they may elect. Such courses cannot, however, be subsequently considered as time spent in the course for the degree of Doctor of Veterinary Medicine. Nor can such students enter upon the regular veterinary course without complying with all the regular requirements for admission.

CLASSIFICATION OF STUDENTS

Students are divided into four classes, according to their proficiency and the time spent, viz., first, second, third and fourth year. Students cannot advance to a higher class with more than one major and one minor condition. Students failing in any subject or subjects may be permitted at the next examination period a re-examination in the subjects in which they fail. The Faculty may dismiss any student from the College, if in its judgment such student be deemed an unsuitable person, intellectually or otherwise, for the profession of veterinary medicine.

ORDER OF INSTRUCTION

The subjects studied in each year are shown in the following table:

FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
Anatomy	Anatomy	Theory and Practice	Theory and Practice
Histology	Physiological and Laboratory	Bacteriology	Small Animal Practice
Embryology	Chemistry	Pathology and Laboratory	Surgery and Restraint
Chemistry and Physics	Pharmacy	Diagnosis	Therapeutics
Botany and Toxicology	Physiology	Surgery and Restraint	Obstetrics
Zoology	Hygiene	Soundness and Lameness	Veterinary Jurisprudence
Horseshoeing	Breeds and Breeding	Clinics	Parasitology
Dentistry	Dairy Inspection		Control of Infective Diseases
	Feeds and Feeding		Meat Inspection and P. M. Examination
	Materia Medica		Clinics
	Clinics		

For lecture, laboratory and dissecting hours a schedule card is furnished. 80 per cent of attendance is required in all courses.

Clinical work in the veterinary and canine hospitals connected with the College and at abattoirs and stock and dairy farms is required of second, third and fourth year students.

ANATOMY

TUNIS HICKS, D.V.M.....Assistant Professor
HARRY THOMAS CLAYTON, D.V.M.....Instructor

The instruction in Anatomy is given in a series of lectures, demonstrations, recitations, and laboratory work, the latter being the most important.

The lectures are intended to present the general anatomical features of the horse and other domestic animals, and to point out the anatomical relations of the organs and parts of the body most subject to surgical operations.

The horse is used as the type subject in dissection, and every student is required to dissect all the parts of the horse, and such other of the domesticated animals, including the ox, sheep, swine, dog and cat, as may prove most expedient.

The laboratory is well supplied with all of the parts of the skeleton of the horse, and portions of the skeleton of various other domestic animals, for the work in osteology. Ample material is always available for the dissection of joints, muscles, viscera, and the vascular and nervous systems. The laboratory is also provided with a complete model of the horse, showing the relation of all the organs and parts of the body, for demonstrations in general and surgical anatomy. The course extends throughout the first and second years.

Text-book.—Sisson's Veterinary Anatomy.

HISTOLOGY AND EMBRYOLOGY

OSCAR BENWOOD HUNTER, M.D.....Professor

These subjects are taught by a series of carefully correlated lectures, recitations, quizzes and demonstrations, and will include such instruction in microscopy as a working knowledge of the use of the simple and compound microscope and accessories, supplemented by the fundamental laws of optics; the method of preparing tissues for microscopic examination, and the technique of mounting.

Comparative histology will deal with the minute structure of the tissues and organs of various animals, including man. In addition to the microscopical demonstrations, lantern demonstrations will also be given.

Embryology under this head will present the salient features of the anatomy and physiology of the fecundated ovule up to the time of birth.

Text-book.—Piersoll.

PHYSIOLOGY

ARTHUR ALEXANDER EISENBERG, A.B., M.D.....Instructor

The course in Physiology consists of lectures, demonstrations and laboratory exercises. The lectures cover all the important facts and theories regarding bodily functions of the animal, and are illustrated by diagrams, models and prepared specimens.

In the laboratory each student performs a number of experiments on blood, on the circulation, on digestion, on the general functions of nerves and muscles, and on the special senses of animals.

Special emphasis is laid on the relation of normal physiological functions to the disturbances of function in disease and upon the physiological action of drugs.

It is intended in this way to bring the work of the Physiological Laboratory and other exercises into closer relation with the succeeding course in Pathology, Therapeutics and General Veterinary Medicine.

Text-book.—Smith's Veterinary Physiology.

GENERAL CHEMISTRY

First Year

CHARLES EDWARD MUNROE, Ph.D., LL.D.....Professor
OTIS DOW SWETT, S.M.....Assistant Professor

General Chemistry.—A series of illustrated lectures, accompanied by recitations and exercises on theoretical, inorganic, organic and technical Chemistry. The student is required to take notes on these lectures, which he must submit for examination.

Laboratory Practice.—A laboratory course for the study of the principles of chemistry which is designed to instruct students in the methods of conducting chemical experiments.

Text-book.—Holland's Medical Chemistry and Toxicology.

PHYSIOLOGICAL CHEMISTRY

Second Year

FRANK ADELBERT HORNADAY, S.B., M.D.....Professor

This course will consist of lectures and laboratory instruction, and includes the study of water from a sanitary standpoint; the chemical examination of milk, the tissues and fluids of the body; the isolation of the digestive enzymes, and a study of their action in vitro.

MATERIA MEDICA AND THERAPEUTICS

DAVID EASTBURN BUCKINGHAM, V.M.D.....Professor
HARRY ALOYSIUS LOCHBOEHLER, D.V.M.....Instructor

Second Year

(1) Lectures upon and demonstrations of drugs and their preparations and doses used in veterinary practice will be followed by recitations to assist in memorizing. (2) Practical exercises will be given in prescription writing.

Fourth Year

(1) Systematic lectures upon the physiological action of drugs and their effects in disease, their therapeutic uses, and their methods of administration to animals. (2) Prescription writing, in which students are given hypothetical cases for which to prescribe. (3) The therapeutic application of various agencies not drugs.

Text-book.—Winslow's Veterinary Materia Medica and Therapeutics.

PRACTICE OF VETERINARY MEDICINE

JOHN POLLARD TURNER, V.M.D.....Professor

This subject is taught by a series of lectures, recitations, quizzes and clinics extending over a period of two years.

The student is personally drilled in all the various diseases and doctrines taught in a well regulated veterinary school.

Especial attention is given to practical work whereby the student can become proficient in the diagnosis and treatment of disease.

Visits are required to the three veterinary hospitals in connection with the University, and personal attention is given students in visits to various large stables in and adjacent to the city of Washington, where practical instruction is given the third and fourth year classes in physical diagnosis among horses, cows and hogs.

Equal attention is given diseases of cattle as of horses, whereby the student is properly fitted for either city or country practice.

Diseases of food-producing animals will be thoroughly explained.

Text-books.—Freidberger and Froehner's Pathology and Therapeutics of Domestic Animals; Hutyra and Marek Special Pathology and Therapeutics of Domestic Animals; Malkmus' Clinical Diagnosis; Glass' translation of Muller's Diseases of the Dog.

VETERINARY SURGERY AND RESTRAINT

JOHN LOCKWOOD, D.V.S.....Professor

The instruction given in this course embraces systematic lectures upon the principles and practice of Veterinary Surgery.

The different surgical operations are illustrated in clinic and upon the cadaver, and the uses of all the important surgical instruments and appliances are demonstrated in the same manner. The use of anesthetics, the practice of dental surgery, and castration on all domestic animals will receive special attention.

Text-books.—Moeller's Operative Veterinary Surgery; Fleming's Operative Veterinary Surgery; Hobday's Canine and Feline Surgery; Williams' Principles and Practice of Veterinary Surgery; Pfeiffer and Williams' Surgical Operations; White's Restraint of Domestic Animals; Merillat's Surgery.

BACTERIOLOGY AND PATHOLOGY

MARCUS WARD LYON, JR., M.D., Ph.D.....Professor
JAMES ROBERT SCOTT, M.D.....Instructor

Bacteriology.—This subject comprises laboratory instruction in the fundamental principles and methods of pure bacteriology. Thorough drilling is given in the preparation of culture media, in disinfection, sterilization, staining and the general methods of bacterial differentiation. Following this course, which is given daily during October, the further study of bacteria is taken up in connection with and as applied to pathology.

Pathology comprises the laboratory study of the general and special phenomena of inflammation, and a detailed study of the pathological processes found in the various diseases. The relation of bacterial and other microphytic life to disease processes and results is studied coincidentally and constitutes a course in applied bacteriology. In connection with the laboratory work a course of lectures and demonstrations is given upon immunity, serum therapy and protective inoculation.

Surgical Pathology.—A special course in the healing of wounds and injuries and in the pathology of surgical operations is given in the third and fourth years.

Clinical Microscopy.—Comprising the study of the various tissues, fluids, ejecta, and dejecta, with a view to diagnosis of diseased conditions, is given in the first part of the third year.

Text-book.—Delafield and Prudden's Pathology, Hiss and Zinsser's Text-book on Bacteriology.

PATHOLOGY, TREATMENT AND CONTROL OF INFECTIOUS DISEASES

SAMUEL SUTHERLAND BUCKLEY, M.S., D.V.S.....Professor

The lectures in this course will be given with reference to the etiology, pathogenesis, symptoms, diagnosis, treatment and prevention of the infectious diseases. Local and national regulations and measures governing the control and eradication of diseases, with particular reference to the work of the United States Government in the eradication of infectious diseases will be clearly explained.

Text-books.—Hutyra and Marek, Special Pathology and Therapeutics of Domestic Animals, Volume I, translated by Mohler, Eichhorn and Fisher; Moore's The Pathology of Infectious Diseases of Animals; James Laws's Veterinary Medicine, Volume IV, third revised edition.

BREEDS AND BREEDING

RALPH GONGWER, B.Sc. in Agric.....Instructor

The course covers the chief phases of live-stock work, including the judging, breeding and management of horses, cattle, sheep and swine.

It is introduced by discussions upon the origin of animal life, natural selections, the origin of breeds and the domestication of animals, as well as the principles of breeding, heredity, environment, selection, individual conformation and the history and development of breeds.

Students obtain practical experience in the judging of the various breeds and classes of animals, by visits to neighboring farms.

Text-books.—Plumb's Types and Breeds of Farm Animals; Goubaux and Barrier's Exterior of the Horse.

FEEDS AND FEEDING

RALPH GONGWER, B.Sc. in Agric.....Instructor

This course will cover the principles of animal nutrition, balanced rations, practical feeding and the economical production of beef, milk, mutton and pork.

Text-book.—Henry's Feeds and Feeding.

HYGIENE AND DAIRY INSPECTION

CHAUNCEY MERLE GRUBB, D.V.M.....Instructor

The course in Milk hygiene will be given by lectures and demonstrations throughout the second year. The students will be taught the theory of milk secretion, the composition and characteristics of milk, the various methods of testing, together with the chemistry and bacteriology of milk, abnormal forms of milk, and diseases transmissible through milk to bovines and human beings, with a study of the epidemics produced. Sanitary stabling and the sanitary handling of milk will be considered, showing the construction of various types of dairy barns and dairy houses, the manner of milking, care of the milk and the varieties and care of dairy utensils; also the study of sterilization and pasteurization.

Text-books.—Jensen's Milk Hygiene, translated by Pearson. Bulletin No. 56, Marine-Hospital Service, Milk and its Relation to the Public Health.

MEAT INSPECTION AND POST-MORTEM EXAMINATION

MORRIS WOODEN, Ph.B., D.V.M.....Instructor

The subject involves the control of food animals destined for slaughter; their ante-mortem and post-mortem inspection with reference to the diseases which affect the wholesomeness of the meat. Further, the preparation of meat-food products, the various methods of preservation of meat and the conditions to which the meat and meat products are subject due to the different infections and contaminations. The appli-

cation of the Regulations of the Department of Agriculture in connection with the judgment of carcasses, meats and meat-food products.

Practical demonstrations in meat inspection and judgment will be given at the local abattoirs.

Post-mortem examinations and demonstrations of morbid anatomp will be given, as opportunities arise, in the various hospital and ambulatory clinics in and about Washington, D. C. Special consideration will be given to discussion of gross pathological changes, procedure of technic, preparation of pathological specimens for museum purposes and methods of securing and forwarding material for diagnosis. Students will be required to write complete protocols of each case.

Text-book.—Mohler and Eichhorn's translation of Edelmann's Meat Hygiene, second revised edition.

ZOOLOGY AND PARASITOLOGY

ERNEST NEAL CORY, M.S.....Assistant Professor

Zoology.—In this course a brief survey of the general principles of zoology is undertaken. The history of zoology, the classification of the animal kingdom, the structure of typical forms in the different Phyla and the distribution of animals on the face of the earth will be considered. The course is designed to familiarize the student with the main facts and theories of zoology.

Parasitology.—This course is designed to give the student a practical knowledge of animal parasites. The nature of parasitism, the classification of parasites and the structure and life histories of those parasites of importance from the standpoint of meat inspection and veterinary practice are considered. By the use of fresh and preserved materials the student is given a first-hand knowledge of the more important parasites. Due consideration is given to the diseases caused by animal parasites, their prophylaxis, treatment and eradication.

VETERINARY OBSTETRICS

CHAUNCEY MERLE GRUBB, D.V.M.....Instructor

The course of instruction will consist of lectures on obstetrical anatomy, foetal development, presentations and the diseases incidental to the periods of gestation and parturition.

The lectures will be illustrated by diagrams, models, natural preparations, and other appliances for demonstrating the principles taught.

Text-book.—Fleming, Dalrymple, Williams.

SHOEING AND BALANCING

JOHN JAMES ESSEX, D.V.M.....Instructor

The course is intended to familiarize students with the principles of shoeing, the examination of the feet and proper use of special shoes for relief of defects or disease.

Text-book.—Lungwitz on Horseshoeing, Adams' translation.

DENTISTRY

JOHN JAMES ESSEX, D.V.M. ..... Instructor

The course in dentistry includes lectures on the development of the teeth of the domesticated animals, the determination of age, irregularities of the teeth, oral surgery and dental clinics.

Text-book.—Merillats' Animal Dentistry and Diseases of the Mouth.

BOTANY AND TOXICOLOGY

LOUIS V. DIETER, Phar.D..... Instructor

The course in botany embraces the general relation of plants, vegetative organs, their functions, reproductive organs and nutrition.

Ecological factors, diversity of plant life, evolution of sex, differentiation of tissues, and plant physiology will be fully considered.

PHARMACY

LOUIS V. DIETER, Phar.D..... Instructor

Pharmacy includes the history and nomenclature of the U. S. Pharmacopoeia, metrology, metric system and common system of weights and measures. Principles employed in making various preparations, classification of official preparations, incompatibility.

Supplemented by laboratory work in which students are required to compound formulae of ointments, lotions, draughts and various preparations, official and extemporaneous.

VETERINARY JURISPRUDENCE

HENRY IGNACIUS QUINN, LL.M..... Lecturer

A series of lectures upon the Law of Animals, including suggestions relating to the conduct of veterinarians as experts in the trial of cases involving the above law.

SPECIAL LECTURES

In addition to the foregoing courses of lectures, a number of government experts have been engaged to give lectures on subjects of special interest to the veterinarian.

These men are specialists in their lines of scientific research.

EXAMINATIONS AND DEGREE

Examinations are held at the end of the course in each subject. Students failing in examinations will be permitted to be re-examined at the next regular examination period. Students will not be admitted to examination unless they have paid all fees due at the time or present a permit signed by the Dean. In order to avail themselves of the privilege of re-examination, students must file their written applications with the Dean not later than fifteen days before the date set for the examinations.

Proficiency is marked upon a scale of 100. A grade of 70 is required to pass an examination. Students who fail to appear at the regular examination period will be charged a fee of $3 for a special examination in each subject.

If a satisfactory examination is passed, the student receives the Degree of Doctor of Veterinary Medicine (D.V.M.).

PRIZES

1. Prize for student attaining highest average for whole course.
2. Prize for best work in operative surgery for senior student.
3. Prize for best anatomical specimen prepared by a Sophomore student.
4. Prize for best anatomical specimen prepared by a Freshman student.

In addition to the foregoing, students attaining a general average of 90 per cent or over for the entire course will be graduated "With Distinction," the same to be inscribed upon their diploma.

THE VETERINARY LIBRARY

This library is located in the Administration Building of the College of Veterinary Medicine, and is open from 8 a.m. to 10 p.m.

It contains, in addition to volumes on veterinary medical subjects, the current veterinary journals.

Provision is made in the annual library fee charged every student to add to it as published, the important new works on veterinary medicine.

OTHER LIBRARIES

Washington contains the Library of the Surgeon-General's Office of the United States Army, the most complete medical library in the world. This library, as all other libraries of the government, is open to the public between the hours of 9 a.m. and 4.30 p.m. There is also the Library of Congress and the many excellent libraries of the various other government offices, in addition to the University Medical Library.

FEES AND CONTINGENT EXPENSES

1. Matriculation fee (payable only on first entry into the University)	$5
2. Library fee per annum	2
3. Tuition fee per annum	100
4. Fee for graduation	10

A deposit of $5 per annum is required of every student to cover loss, breakage or damage to the property of the school. The amount of such deposit paid in excess of the breakage will be returned.

No change will be made in the fees fixed at registration except in case of withdrawal, and then only upon notice in due form, and from the end of the current quarter-session, when such withdrawal shall be approved. Applications for the granting of a withdrawal should be made on the prescribed form to be obtained from the Registrar, and will be received only at the end of a quarter-session.

Students are urged to purchase their own microscopes, but those who do not care to do so may rent them from the University at the following rates:

Microscope for Histological Laboratory use	$5
Microscope for Bacteriological, Pathological and Clinical Microscopy Laboratory use	6

PAYMENT OF FEES

All fees are to be paid to the clerk. Tuition fees are payable quarterly, in advance. Matriculation, library and laboratory fees are payable in full, in advance.

STUDENT EMPLOYMENT

The College of Veterinary Medicine will aid students, especially those coming from a distance, to obtain suitable employment as a means of defraying a part or all of their expenses while in pursuit of their college course. Opportunities for such employment in Washington are exceptionally good. The many Departments of Government, the Library of Congress, Congressmen's secretaryships, law offices, contractors' and architects' offices, journalism, stenography, etc., offer a large number of positions of the most diverse kinds. While the College must not be understood as in any sense engaging to find employment for prospective students, in a great many cases important assistance can be rendered duly qualified applicants, if the fact of their desire to obtain employment is known. Applicants are particularly cautioned against coming to the University, intending to depend upon outside employment for support without being provided with funds sufficient to meet the

expenses of at least the first half-year. Communications should be addressed to

THE DEAN,
College of Veterinary Medicine,
George Washington University,
2113-2115 Fourteenth St. N.W., Washington, D.C.

BOARD AND ROOMS

A register of approved boarding-houses is kept by the clerk. Accommodations cost from $20 to $40 a month.

For further information apply to

DAVID E. BUCKINGHAM, Dean,
George Washington University,
College of Veterinary Medicine,
Nos. 2113-2115 Fourteenth St. N. W. Washington, D. C.

PART IV

STUDENTS IN THE UNIVERSITY

Names of students who have withdrawn or graduated are indicated by stars; those who have entered since January 31, 1916, by daggers

DEGREES CONFERRED, MISCELLANEA

DEPARTMENT OF ARTS AND SCIENCES

In the enumeration of undergraduate students the column of figures indicates the number of hours of work taken by the student prior to the beginning of the current academic year, 1915–16, and completed without conditions, or credited on advanced standing in candidacy for a degree. In Columbian College 60 credits are required for graduation; in Teachers College, 62; in the College of Engineering 70.

SCHOOL OF GRADUATE STUDIES

IN ATTENDANCE

Name	*Legal Residence*	*Address*
†Hersperger, Julia Eliza S.B., 1912, Syracuse University *Topic*—Sociology	Md.	510 I Street
*Munroe, Russell Barker B.S. in E.E., 1911, University of Pennsylvania; E.E., 1912, George Washington University *Topic*—Chemistry	Utah	2115 S Street
Starbecker, Moses S.B., 1910, College of the City of New York *Topics*—Biochemistry, Bacteriology	D. C.	1104 5th Street

DOCTOR OF CIVIL LAW

*Miller, Clarence Alphonso LL.B., 1899, Kansas City School of Law; LL.M., 1905, M. Dip., 1906, George Washington University	Mexico	American Consulate, Tampico, Mexico, c/o State Department

CIVIL ENGINEER

Barber Charles Wightman B.S. in C.E., 1915, George Washington University	D. C.	3428 Brown Street
†Sale, Prentiss Dixon, Jr. B.S. in C.E., 1916, George Washington University	D. C.	235 8th Street, N.E.

* Students who have withdrawn or graduated.
† Students who have entered since January 31, 1916.

Name	*Legal Residence*	*Address*
Wharton, Roger Daniel B.S. in C.E., 1915, George Washington University	D. C.	Fairfax Court House, Va.

ELECTRICAL ENGINEER

McCalip, Curtis Edgar B.S. in E.E., 1912, George Washington University	Md.	1231 Harvard Street
Safford, Howard Palmer B.S. in E.E., 1912, George Washington University	D. C.	1933 Park Road

MECHANICAL ENGINEER

Halsey, Arthur Sherman B.S. in M.E., 1914, George Washington University	D. C.	1337 Perry Place
Hatfield, Harold DeWolfe B.S. in M.E., 1915, George Washington University	D. C.	1344 Otis Place
McClure, Clinton Inness B.S. in M.E., 1915, George Washington University	Kans.	2110 H Street
Walen, Ernest Dean B.T.E., 1914, Lowell Textile School	Mass.	1437 Belmont Street
Whittle, George Valentine Graduate, 1914, Webb Academy	N. Y.	1810 9th Street

MASTER OF SCIENCE

*Beckerman, Bernard S.B., 1915, Cornell University *Topics*—Major, Bacteriology; Minors, Pathology, Physiology	N. Y.	925 D Street
*Berman, Harry Ciccero B.S. in Chem. Eng., 1914, University of Minnesota *Topics*—Major, Chemistry; Minors, Bacteriology, Physiology and Pharmacology	Minn.	1726 P Street

Name	*Legal Residence*	*Address*
Caum, Edward Leonard A.M., 1914, Swarthmore College *Topics*—Major, Zoology; Minors, Zoology, Bacteriology	D. C.	115 12th Street, S.E.
Coe, Mayne Reid B.S. in Chem., 1914, George Washington University *Topics*—Major, Chemistry; Minors, Physics, Microscopy	D. C.	2947 Mills Avenue, N.E.
Dodge, Cleon Orestes S.B., 1905, New Hampshire College *Topics*—Major, Chemistry; Minors, Bacteriology, Microscopy	N. H.	Dept. of Agriculture, Bureau of Chemistry
Eisenberg, Arthur Alexander A.B., 1910; M.D., 1911, George Washington University *Topics*—Major, Preventive Medicine; Minors, Bacteriology, Pathology	D. C.	1108 3d Street
Ellison, Arthur Daniel B.S. in Agric., 1912, Utah Agricultural College *Topics*—Major, Botany; Minors, Botany, Zoology	Utah	926 15th Street
Enlows (Mrs.), Ella Morgan Austin A.B., 1915, George Washington University *Topics*—Major Bacteriology; Minors, Chemistry, Zoology	W. Va.	1477 Newton Street
Evans, Morgan William B.S.A., 1906, Cornell University *Topics*—Major, Botany; Minors, Zoology, Chemistry	Ohio	Office of Forage Plants Investigations, Dept. of Agriculture

Name	*Legal Residence*	*Address*
Gamble, James Alexander Graduate, 1909, Connecticut Agricultural College *Topics*—Major, Bacteriology; Minors, Chemistry, Bacteriology	D. C.	514 C Street, N.E.
Hornaday, Francis Adelbert S.B., 1907; M.D., 1910, George Washington University *Topics*—Major, Chemistry; Minors, Chemistry, Pathology	D. C.	3509 14th Street
John, Otto Marion A.B., 1908, Union College *Topics*—Major, Chemistry; Minors, Zoology, Physiology	D. C.	C/o College, Takoma Park D. C.
Johnston, Edward Clyde A.B., 1913, University of Kansas *Topics*—Major, Zoology; Minors, Zoology, Botany	Calif.	U. S. Bureau of Fisheries
Lee, William Canfield A.B., 1896, Kenyon College *Topics*—Major, Economics; Minors, Philosophy, Sociology	Va.	1741 Lanier Place
*Little, Arlington Pearl S.B., 1901, E.E., 1904, University of Vermont *Topics*—Major, Electrical Engineering; Minors, Education, Mechanical Engineering	Mich.	3024 15th Street
*†Moxon, Frank Macquarie A.B., 1915, Maryville College, Sc.B., 1915, Valparaiso University *Topics*—Major, Pathology; Minors, Bacteriology, Chemistry	Ohio	1225 L Street

Name	*Legal Residence*	*Address*
Pedersen, Aksel Marius B.S. in Chem., Eng., 1913, Massachusetts Institute of Technology *Topics*—Major, Chemistry; Minors, Electrical Engineering; Mechanical Engineering and Mathematics	Mass.	1929 K Street
Piper, Homer Allen B.S. in Chem., 1914, University of Wisconsin *Topics*—Major, Chemistry; Minors, Chemistry, Microscopy	Wis.	2017 19th Street
Roeser, Harry Mance S.B., 1914, Oklahoma Agricultural and Mechanical College *Topics*—Major, Physics; Minors, Electrical Engineering, Mathematics	Ill.	Bureau of Standards
Smith, Delos Hamilton B.S. in Arch., 1906, George Washington University *Topics*—Major, History of Art; Minors, Architecture, Archaeology	D. C.	Southern Building
Smith, Edward Elmer B.S. in Chem. Eng., 1914, University of Idaho *Topics*—Major, Chemistry; Minors, Chemistry, Bacteriology	Idaho	1409 15th Street, Apt. 4
Weinstein, Reuben A.B., 1914, George Washington University *Topics*—Major, Chemistry; Minors, Chemistry, Bacteriology	N. Y.	40 New York Avenue
Wetmore (Frank) Alexander A.B., 1912, University of Kansas *Topics*—Major, Zoology; Minors, Zoology, Geology (Paleontology)	D. C.	1495 Newton Street

Name	*Legal Residence*	*Address*
Williams, Richard Calvert S.B., 1914, Maryland Agricultural College *Topics*—Major, Bacteriology; Minors, Biochemistry, Chemistry	Md.	Box 353, Alexandria, Va.

MASTER OF ARTS

Albertsworth, Edwin Franklin A.B., 1915, George Washington University *Topics*—Major, History; Minors, Philosophy, Economics	D. C.	130 Carroll Avenue, Takoma, Park, D. C.
Basey, James Dodson A.B., 1915, University of South Carolina *Topics*—Major, Political Science; Minors, History, Economics	Oregon	1741 G Street
Bayly, Margaret A.B., 1914, George Washington University *Topics*—Major, English; Minors, English, History of Art	D. C.	1333 11th Street
Birnie, Martha Noyes A.B., 1915, George Washington University *Topics*—Major, English; Minors, History, History	D. C.	1711 19th Street
Bloedorn, Walter Andrew M.D., 1909, Creighton University, Omaha; A.B., 1915, George Washington University *Topics*—Major, Psychology; Minors, Preventive Medicine, Physiology and Pharmacology	D. C.	Quarters "K," Navy Yard
Bready, Marcia A.B., 1905, Bryn Mawr College *Topics*—Major, History; Minors, History, Sociology	N. Y.	National Cathedral School

Name	*Legal Residence*	*Address*
Chang, Ming A.B., 1905, LL.B., 1907, Wuchang University *Topics*—Major, Political Science; Minors, International Law and Diplomacy, Economics	China	Chinese Legation
†Collins, James Harold A.B., 1907, Bowdoin College; M.D., 1915, George Washington University *Topics*—Major, Pharmacology; Minors, Physiology, Psychology	D. C.	1435 9th Street
Davis, Joseph Dana A.B., 1905, Ohio State University *Topics*—Major, Physics; Minors, Mechanical Engineering, Electrical Engineering	D. C.	2311 Nebraska Avenue
Deffenbaugh, Walter Sylvanus A.B., 1898, West Virginia University *Topics*—Major, Education; Minors, Sociology, Education	D. C.	319 Butternut Street, Takoma Park, D. C.
*Donnan, Elizabeth A.B., 1907 Cornell University *Topics*—Major, History; Minors, Political Science, Economics	Ohio	1140 Woodward Building
Draper, Henry White A.B., 1909, George Washington University *Topics*—Major English; Minors, Education, Education	D. C.	The Cavendish
Fink, Reuben A.B., 1911, George Washington University *Topics*—Major, Education; Minors, Economics, Education	D. C.	1543 6th Street

Name	*Legal Residence*	*Address*
Gourley, Louis Hill A.B., 1912, University of Illinois *Topics*—Major, Economics; Minors, Political Science, French	Ill.	1914 Pennsylvania Ave.
Gronberger, Sven Magnus Graduate, 1884, Gymnasium, Norrkoping, Sweden *Topics*—Major, Zoology; Minors, Zoology, Geology	N. Y.	1904 G Street
Heller, Mary Elizabeth S.B., 1908, Columbia University *Topics*—Major, German; Minors, Romance Languages, Sociology	Md.	1340 Otis Place
Hobbs, Ewart William Senior, Columbian College *Topics*—Major, Philosophy; Minors, English, Philosophy	Va.	R. F. D. No. 4, Box 196 B, Washington, D. C.
Hodgkins, George Wilson A.B., 1915, George Washington University *Topics*—Major, Education; Minors, Education, Economics	D. C.	1830 T Street
Huff (Mrs.) Daisie Morgan S.B., 1902, Valparaiso University; A.B., 1911, George Washington University *Topics*—Major, Education; Minors, Psychology, Philosophy	D. C.	2134 F Street
Keats, Harold A.B., 1912, George Washington University *Topics*—Major, History; Minors, History, Political Science	D. C.	University Club
*Lasier, Harriet Catherine A.B., 1915, George Washington University *Topics*—Major, English; Minors, German, English	D. C.	1427 Girard Street

Name	*Legal Residence*	*Address*
†Lavadia, Pedro Celestino S.B., 1916, Cornell University *Topics*—Major, History; Minors, Political Science, Education	P. I.	2121 F Street
*MacFarlane, Nellie Rae A.B., 1915, George Washington University *Topics*—Major, Bacteriology; Minors, English, Geology	D. C.	2005 G Street
Masone, Joseph Graduate, 1912, R. Scuola Normale, Caschile, Pisa, Italy *Topics*—Major, Philosophy; Minors, Education, Psychology	Italy	815 East Capitol Street
*Miladofsky, Emily S.B., 1901, University of Chicago *Topics*—Major, Sociology; Minors, French, German	Wis.	Bureau of Labor Statistics
Muerman, John Charles A.B., 1910, Washington State College *Topics*—Major, Education; Minors, Romance Languages, and Literature History	D. C.	1748 M Street
Neal, Earl Stephens A.B., 1915, Howard Payne College *Topics*—Major, History; Minors, Political Science, Philosophy	Texas	2148 F Street
Patrick, Wellington A.B., 1915, George Washington University *Topics*—Major, Education; Minors, Education, Economics	D. C.	1814 G Street

Name	*Legal Residence*	*Address*
Patterson, Ruth Capelle A.B., 1915, George Washington University *Topics*—Major, Zoology; Minors, English, History	D. C.	422 Randolph Street
*Paul (Mrs.) Edith Compton A.B., 1909, George Washington University *Topics*—Major, Zoology; Minors, Botany, Zoology	D. C.	3551 Holmead Place
Pfeiffer, John Arthur Franklin M.D., 1908, Baltimore Medical College *Topics*—Major, Pathology; Minors, Bacteriology, Psychology	Md.	Government Hospital for Insane
Salisbury, Elon Galusha S.B., 1911, Union College, Nebraska *Topics*—Major, Education; Minors, Education, Philosophy	D. C.	Takoma Part Station D. C., C/o College
Schenck (Mrs.) Stella Ruth A.B., 1914, George Washington University *Topics*—Major, Preventive Medicine; Minors, Sociology, Economics	Ind.	1723 G Street
*Schoenfeld, Rudolf Emil A.B., 1915, George Washington University *Topics*—Major, English; Minors, English, History, Political Science	D. C.	3448 34th Place, Cleveland Park, D. C.
Spamer, Carl Ober LL.B., 1914, University of Maryland *Topics*—Major, International Law and Diplomacy; Political Science, Economics	Md.	1769 Willard Street
Swain, Henry Lewis Th.G., 1905, Louisville Theological Seminary *Topics*—Major, Education; Minors, Philosophy, Sociology	Va.	Clarendon, Va.

Name	*Legal Residence*	*Address*
Underwood, Harriet A.B., 1913, George Washington University *Topics*—Major, Education; Minors, History, Education	D. C.	2551 37th Street
Wanlass, William Lawrence A.B., 1915, George Washington University *Topics*—Major, Political Science; Minors, History, Economics	Utah	2106 F Street
Weber (Mrs.) Angelia Washburn A.B., 1912, Colorado State Teachers College *Topics*—Major, Education; Minors, English, Education	Colo.	C/o Washington College, Takoma Park, D. C.
Wilson, Anita Alvera A.B., 1908, M.D., 1911, Syracuse University *Topics*—Major, Physiology; Minors, Psychology, Preventive Medicine	N. Y.	Government Hospital for Insane
Winchester, Almira Munn B.S. in Ed., 1911, Columbia University *Topics*—Major, Education; Minors, Philosophy, History	Canada	1727 Lamont Street
Yang, Yung-Ching A.B., 1910, Soochow University *Topics*—Major, International Law and Diplomacy; Minors, Political Science, History	China	2023 Kalorama Road
*Yeaw, Faith Leone A.B., 1913, Smith College *Topics*—Major, Sociology; Minors, Economics, English	Vt.	The Logan, Iowa Circle

DOCTOR OF PHILOSOPHY

Name	*Legal Residence*	*Address*
Alden, Levi Russell A.B., 1903, A.M., 1904, LL.B., 1906, George Washington University *Topics*—Major, History; Minors, Law, History	D. C.	809 L Street
Bevard, Katherine Harper A.B., 1911, A.M., 1913, George Washington University *Topics*—Major, Education; Minors, Education, English	Pa.	1423 R Street
†Blumberg, Alfred Ph.M., 1905, Royal Francis Joseph University, Hungary *Topics*—Major, Bacteriology; Minors, Pathology, Histology and Embryology	Mont.	215 9th Street
Brigham, Gertrude Richardson A.B., 1913, A.M., 1914, George Washington University *Topics*—Major, English; Minors, Archaeology, History	Mass.	Smithsonian Institution
Catella, Samuel Spinoza Universities of Amsterdam and Utrecht *Topics*—Major, Economics; Minors, Education, Political Science	Holland	813 21st Street
Clothier, Robert Waitman S.B., 1897, S.M., 1899, Kansas State Agricultural College *Topics*—Major, Economics; Minors, Geology, Education	Kansas	3124 19th Street
Custis, Horace Hatch A.B., 1906, Johns Hopkins University, A.M., 1908, George Washington University *Topics*—Major, Chemistry; Minors, Chemistry, Bacteriology	D. C.	The Iroquois

Name	*Legal Residence*	*Address*
Doyle, Aida Mary S.B., 1898, S.M., 1899, George Washington University *Topics*—Major, Chemistry; Minors, Chemistry, Physics	Pa.	3730 Northampton Street
†Ellison, Everett Monroe A.B., 1901, A.M., 1903, University of Chattanooga; M.D., 1912, George Washington University *Topics*—Major, Physiology; Minors, Pharmacology, Psychiatry	Tenn.	The Toronto
Garber, John Absalom A.B., 1891, Bridgewater College; A.M., 1915, George Washington University *Topics*—Major, Education; Minors, Philosophy, Psychology	D. C.	508 B Street, S.E.
Gronberger, Sven Magnus Graduate, 1884, Gymnasium, Norrkoping, Sweden *Topics*—Major, Zoology; Minors, Zoology, Geology	N. Y.	1904 G Street
Hanna, G. Dallas A.B., 1910, A.M., 1913, University of Kansas *Topics*—Major, Zoology; Minors, Zoology, Botany	Kans.	Bureau of Fisheries
Harter, Leonard Lee A.B., 1903, A.M., 1906, University of Nebraska *Topics*—Major, Botany; Minors, Bacteriology, Zoology	D. C.	1880 Monroe Street
Huddle, John Thomas A.B., 1891, A.M., 1896, Roanoke College *Topics*—Major, English; Minors, Psychology, Philosophy	D. C.	738 11th Street

Name	*Legal Residence*	*Address*
Ice, Harry Lawrence A.B., 1912, A.M., 1912, Bethany College *Topics*—Major, Philosophy; Minors, English, Sociology	Md.	Mt. Ranier, Md.
John, Walton Colcord A.B., 1914, A.M., 1915, George Washington University *Topics*—Major, Education; Minors, Psychology, Philosophy	Md.	127 Carroll Avenue, Takoma Park, D. C.
Kellogg, Edward Henry S.B., 1911, Kansas State Agricultural College *Topics*—Major, Chemistry; Minors, Bacteriology, Biochemistry	Wis.	C/o Dr. R. H. True, Bureau of Plant Industry
Knudtson, Clarence Andrew A.B., 1913, A.M., 1914, George Washington University *Topics*—Major, English; Minors, Psychology, Economics	Wis.	703 Lawrence Street, N.E.
Lowe, Edith Blinston A.B., 1911, A.M., 1912, George Washington University *Topics*—Major, English; Minors, English, History	Conn.	2622 Woodley Place
Mansfield, Wendell Clay S.B., 1908, Syracuse University; S.M., 1913, George Washington University *Topics*—Major, Zoology; Minors, Zoology, Geology	N. Y.	U. S. National Museum
Oberholser, Harry Church A.B., 1914, S.M., 1914, George Washington University *Topics*—Major, Zoology; Minors, Zoology, Botany	N. Y.	1444 Fairmont Street

Name	*Legal Residence*	*Address*
Resser, Charles Elmer B.Pd., 1912, Millersville State Normal School; A.B. 1913, Franklin and Marshall College; A.M., 1915, George Washington University *Topics*—Major, Geology; Minors, Mineralogy, Zoology	Penn.	U. S. National Museum
Roark, Ruric Creegan A.B., 1907, University of Cincinnati; A.M., 1908, University of Illinois *Topics*—Major, Chemistry; Minors, Bacteriology, Pharmacology	Ky.	1668 Park Road
Roberts, John William A.B., 1904, A.M., 1909, University of Nebraska *Topics*—Major, Botany; Minors, Bacteriology, Chemistry	D. C.	1619 R Street
Rogers, Jerome Stanley B.S. in Chem., 1907, Syracuse University; S.M., 1909, University of Illinois *Topics*—Major, Chemistry; Minors, Bacteriology; Microscopy	N. Y.	832 Rittenhouse Street
Ryan, Calvin Taylor A.B., 1911, A.M., 1914, Washington College *Topics*—Major, English; Minors, Education, Political Science	Md.	City High School, Alexandria, Va.
Ryan, Will Carson, Jr. A.B., 1907, Harvard University; Graduate student Columbia University *Topics*—Major, Education; Minors, German, Romance Languages	N. J.	Bureau of Education

Name	*Legal Residence*	*Address*
*Sampson, Arthur William S.B., 1907, A.M., 1909, University of Nebraska *Topics*—Major, Botany; Minors, Meteorology, Zoology	Neb.	The Cairo
Scheetz, Mildred Esthere B.E., 1913, State Normal School, Peru, Nebraska; M.D., 1912, M.S. in Med., 1913, State University of Iowa *Topics*—Major, Physiology; Minors, Physiology, Pathology	Iowa	Government Hospital for Insane
Scott, James Robert A.B., 1908, University of California; M.D., 1912, Leland Stanford University (Cooper Medical) *Topics*—Major, Bacteriology; Minors, Preventive Medicine, Pathology	D. C.	Army Medical School
Shen, Tsoo-Chen A.B., 1909, St. John's College, Shanghai, China; A.M., 1915, George Washington University *Topics*—Major, History; Minors, Political Science, Economics	China	2014 Kalorama Road
Storm, Christian George S.B., 1898, S.M., 1899, George Washington University *Topics*—Major, Chemistry; Minors, Physics, Mineralogy	N. Y.	115 Rhode Island Avenue
Swan, Guy Carlton A.B., 1913, A.M., 1915, Leland Stanford University *Topics*—Major, Chemistry; Minors, Chemistry, Bacteriology	Mass.	2110 H Street

Name	*Legal Residence*	*Address*
Swett, Otis Dow	Md.	1325 H Street
LL.B., 1891, LL.M., 1892, S.B., 1904, S.M., 1909, George Washington University		
Topics—Major, Chemistry; Minors, Chemistry, Bacteriology		

COLUMBIAN COLLEGE

CANDIDATES FOR THE DEGREE OF BACHELOR OF ARTS

Name	*Credits*	*Legal Residence*	*Address*
Adams, Harry Kuteman	8	S. C.	National Training School
Albes, John Conrad	10½	D. C.	1737 Corcoran Street
Alexander, Walter Richardson	47	Mo.	1110 Rhode Island Avenue
Arledge, Caroline Mascotte	18	Texas	2628 Garfield Street
Bailey, Bertrand Wallace	3	D. C.	Weather Bureau
Ball, Homer William	18	D. C.	Weather Bureau
Barnes, Marjorie	50	D. C.	143 11th Street, N.E.
Barr, Eugene Osmon	20	D. C.	510 A Street, N.E.
Barr, Martin Richard	0	D. C.	28 Seaton Place
Barse, George Percy	41	Md.	1363 B Street, S.E.
Bell, George Edward	0	D. C.	1629 Columbia Road
*Bell, Margaret Wilson	29½	D. C.	1629 Columbia Road
Bennett, Ruth Hilton	0	D. C.	3420 Mt. Pleasant Street
Best, Joanna Elizabeth	51	D. C.	1133 Euclid Street
Bixler, John Shively	22¾	D. C.	821 Massachusetts Avenue, N.E.
Blanchard, Mabel Elizabeth	44½	D. C.	806 Massachusetts Avenue, N.E.
Blue, Kaa Frank	0	Miss.	1100 Vermont Avenue
Bose, Jogesh Chandra	0	India	423 6th Street, N.E.
Bose, Norma	15	D. C.	1923 North Capitol Street
Bradley, Everett Lamont	28	D. C.	60 S Street
Breuninger, Ruth	12	D. C.	5700 16th Street
Brez, Yetta	41	D. C.	1624 9th Street
Brooks, Marian Augusta	20½	D. C.	636 E Street, N.E.
Browne, Margaret Marian	49½	D. C.	1344 Girard Street
Brubaker, Bessie Alfaretta	2¼	Ind.	1150 North Capitol Street
Bruce, Alexander Wallace	49¾	Ohio	4130 7th Street
Buchanan, James Paul, Jr.	0	Texas	1418 N Street

Name	*Credits*	*Legal Residence*	*Address*
Bullough, Joseph Harold	15½	D. C.	122 Tennessee Avenue
Burke, Ellen Teresa	53½	D. C.	531 Jefferson Street, Brightwood, D. C.
Burkhardt, William Hullihen, Jr.	0	Va.	Leesburg, Va.
Burleson, Adele Sidney	31½	Texas	1901 F Street
†Burleson, Jennie May	4	Va.	Fort Myer, Va.
*Burleson, Lucy Kyle	54¾	Texas	1901 F Street
Burlingame, Lucy Llewellyn	12	D. C.	1419 22nd Street
Busch, Howard G.	0	Mo.	219 East Capitol Street
Butler, Marion, Jr.	0	D. C.	2200 R Street
Caemmerer, Johannes Paul	52½	Wis.	928 L Street
Callihan, Loyzelle Josephine	26½	Ark.	118 Willow Avenue, Takoma Park, D. C.
Camfield, Lionel Henry	6	D. C.	1407 Buchanan Street
Carden, Samuel Poe	35¼	Texas	1229 O Street
Carnahan, Lina Wright	16½	D. C.	3606 13th Street
*Carroll, Harry M.	0	Pa.	909 13th Street
*Carroll, Mitchell Benedict	2¼	D. C.	3440 34th Place
Carter, Amy Margaret	6	Ill.	732 Post Office Bldg.
Carter, Catherine	0	Md.	Taylor Street, Chevy Chase
Carter, Hester L.	0	D. C.	27 Quincy Place, N.E.
Carter, Robert Golden	0	Md.	Taylor Street, Chevy Chase
Ceppos, Aaron	0	D. C.	437 7th Street
Chamberlain, Ernest R.	47	Kansas	1914 Pennsylvania Avenue
Chapman, Margaret A.	0	N. Mex.	1204 Massachusetts Avenue
*Chapman, Thomas Hutchison	53½	D. C.	545 Park Road
†Child, St. Julién Ravenet	22½	S. C.	2815 18th Street
Clark, Dana Edward	12	D. C.	202 F Street
Clark, Marguerite Perry	33½	D. C.	1778 Lanier Place
Clark, Naomi Eloise	0	D. C.	1333 Park Road
Cleary, Charles Joseph	27	Mass.	1437 Belmont Street
Clinton, Olive	0	D. C.	1311 Decatur Street
Clinton, Ruby	14	D. C.	1311 Decatur Street
†Collings, Kennedy B.	0	D. C.	1361 Fairmont Street
Cowing, Kemper F.	22½	Ind.	1736 G Street
Crain, Newel Berryman	18½	Texas	1736 G Street
Cullen, Elizabeth Orlan	21	D. C.	307 B Street, N.E
Cunningham, Julian Wallace	46¾	D. C.	1636 Monroe Street
Davis, Dorothy May	28½	D. C.	2212 First Street

Name	*Credits*	*Legal Residence*	*Address*
Davis, Elizabeth Aileen	15	D. C.	2212 First Street
*Davis, John Wesley	27	Mo.	1906 G Street
Davis, Lee Sherman	39½	N. Y.	35 Hickory Avenue, Takoma Park, D. C.
DeGrange, Mark	23	D. C.	25 U Street, N.E.
Devine, William Joseph	49½	Pa.	2004 G Street
Dixon, Edna A.	0	D. C.	2013 I Street
Doing, Jane	37	Md.	Beltsville, Md.
Douglass, Maude	0	D. C.	3520 35th Street
Doyle, Richard Smith	20	N. H.	1204 Massachusetts Avenue
Drake, Alice Hutchins	15½	D. C.	2611 Adams Mill Road
Dunagan, Carlos	0	Ind.	2003 G Street
Dunnells, Cora K.	16	D. C.	The Woodworth
Earll, Donald Montgomery	46	D. C.	2536 14th Street
Earnshaw, Eleanor Allison	0	D. C.	224 8th Street, S.E.
*Eisenman, S. Alvin, Jr.	0	Pa.	1236 Euclid Street
Elgin, Hugh Bassett	21	D. C.	916 15th Street
Elkin, Ernst M.	0	D. C.	101 7th Street, S.E.
*Ellenbogen, Lewis Katzen	58	D. C.	1726 P Street
Ellis, George Stoughton	0	D. C.	3363 18th Street
Ellis, Miner Sears	0	D. C.	3363 18th Street
Enlows, Harold Franklin	19½	D. C.	1477 Newton Street
Erikson, Bernhard Edwin	27½	Ill.	2112 F Street
Etheridge, Florence	35	Mass.	1317 New York Avenue
Evans, John Henry	9½	Pa.	Y. M. C. A.
Fadeley, Fenton Mercer	8½	D. C.	1527 Newton Street
Fairbank, Carl Sherwyn	29½	Mich.	1810 N Street
Farmer, Mary Caroline	35½	N. C.	651 Lexington Place, N.E.
Fearing, Justin Lincoln	33	Mass.	Bureau of Standards
*Fields, Frank Eugene	0	D. C.	1624 30th Street
*Fischer, Edward, LL.B., 1914, Georgetown University	15	D. C.	807 18th Street
Fisher, Mary Ray	0	D. C.	1223 Girard Street, N.E.
Fogerty, Gertrude Catherine	34	D. C.	1161 5th Street, N.E.
Garner, Tully Charles	33¾	Texas	1120 Vermont Avenue
Gatchell, Marie Ellen	45	D. C.	1736 Park Road
Geschickter, Frances F.	7½	D. C.	1239 12th Street
Gill, Minna	12	Md.	Forest Glen, Md.
Gilleland, George Thomas	57½	Mass.	1824 H Street
Gilligan, William James	9¾	W. Va.	2030 F Street
Glover, Clarence Kinsey	0	W. Va.	2 Jackson Place

Name	*Credits*	*Legal Residence*	*Address*
Glueck, Sol S.	0	Wis.	1029 Euclid Street
Godbold, Albea	1½	Minn.	1502 14th Street
Grabill, Mary Eloise	15	D. C.	Takoma Park, D. C.
Gronna, Arthur J.	0	D. C.	St. Regis Apartment 32
Hackworth, Green H., LL.B., 1912, Georgetown University	0	Ky.	156 Uhland Terrace
Haines, Margaret	56	Pa.	1133 Euclid Street
Haines, Mary Susan	0	Mo.	3228 School Street
*Hall, Grace Louise	0	D. C.	235 C Street, N.E.
*Hanna, Louis Curry	0	Pa.	The Maury
Hardy, Margaret Boude	43	D. C.	812 East Capitol Street
Harper, Robert Luther	3	N. C.	1808 G Street
Harvey, Margaret Helena	25	D. C.	1603 Kenilworth Avenue
Haugen, Lauritz G.	0	Iowa	1334 19th Street
Hauke, Rilla May	13½	D. C.	605 Massachusetts Avenue, N.E.
Hearne, Susan Snell	27½	Mo.	1307 P Street
Heitmuller, Elizabeth Roeder	9	D. C.	1307 14th Street
Heron, Katherine Juanita	15½	D. C.	5437 Connecticut Avenue
Herrera, Luis Geigel	44	Porto Rico	1013 H Street
Herrmann, Jane Elizabeth	18	Md.	Kensington, Md.
Hidnert, Peter	34½	D. C.	1102 8th Street
*Hill, Albert Edward	0	D. C.	3421 Brown Street
Hitchcock, Velma Alys	0	D. C.	1633 Irving Street
*Hobbs, Ewart William	56½	Va.	Box 196B, R.D. No. 4
Hoer, Walter Carl	0	Fla.	419 Y. M. C. A.
Hollingsworth, Sidney Pierce, Jr.	0	D. C.	1364 Girard Street
Holm, Adolph F.	10½	Minn.	2004 F. Street
*Horbett, John Edward	12	N. Y.	1227 O Street
Horwitz, Abraham	0	D. C.	9164½ Street, S.W.
Hotchkiss, Helen K.	13½	D. C.	2 Kendall Green
Howard, Deane Childs, Jr.	0	D. C.	The Marlborough
Hsie, Changhsi	27	China	2023 Kalorama Road
Hughes, Lotus Graham	49½	W. Va.	1788 Columbia Road
*Ide, Robert Armington	0	D. C.	644 D Street, N.E.
Jeffries, John Miller	44½	D. C.	1800 New Hampshire Ave.
Jewett, George Parbury Pollen	0	D. C.	1833 Jefferson Place
Johnston, Francis Edgar	20	Va.	Alexandria, Va.
Jonas, Josephine Marie	6	D. C.	1839 Kalorama Road
Jones, Harry B.	18¼	N. J.	1741 G Street

Name	*Credits*	*Legal Residence*	*Address*
Kahn, Esther	16½	D. C.	2515 University Place
Kalaw, Maximo Manguiat	45	P. I.	House of Representatives
Kebler, Victor Lyman	19¾	D. C.	1322 Park Road
Keenan, Gerald James	18	N. Y.	2022 F Street
Keleher, Edith Reynolds	18	D. C.	118 11th Street, S.E.
Kelley, Frank Joseph	49	Wis.	1315 K Street
Kimball, Dorothy	8½	D. C.	1819 Monroe Street
*Kimmell, Helen Marie	6	D. C.	1817 Kalorama Road
Klinge, Ernest Frederick	3	D. C.	119a Bates Street
Kolar, Lenore Edna	0	D. C.	4123 9th Street
Kunkel, Frederick Eugene	21	Pa.	1916 16th Street
†La Forge, Helen Grace	4	D. C.	1221 Fairmont Street
Langellotti, Frank	10	N. Y.	2118 G Street
Larson, John Emil	0	Maine	1902 G Street
Lehman, Roland J.	0	Ill.	1404 Harvard Street
Levy, Arthur	0	D. C.	806 21st Street
Lewis, Ollie Lee	29⅞	Ky.	Weather Bureau
Lindow, Oscar Henry	10½	Wis.	2132½ H Street
Lloyd, Leonila Marie	0	D. C.	Manor House
Lockwood, Chester Walker	15	D. C.	2212 Massachusetts Ave.
†Love, Kathryn Eulalia	0	D. C.	1920 Irving Street, N.E.
Love, Rebecca Lawrence	47	Va.	910 Massachusetts Avenue
Lucal, Ira David	12¾	Ohio	1914 Pennsylvania Avenue
Lutz, Karl Barr	0	D. C.	946 F Street, S.W.
Lyons, Katharine	11¼	D. C.	1349 Columbia Road
McArthur, Louis Eugene	50½	Utah	Interstate Commerce Com.
McCleary, Dorothy	58½	D. C.	217 I Street
McCloud, Marie Congdon	0	D. C.	3401 16th Street
McEntyre, Mary	33½	D. C.	Rock Creek Church Road
McGrew, Martha Steele	0	Tenn.	2703 14th Street
McKelway, Benjamin Mosby	32½	D. C.	2071 Park Road
McKendree, Lawrette	0	N. H.	1300 Fairmont Street
McKenna, Philip Mowry	0	D. C.	621 Alabama Avenue, S.E.
McKnew, Donald Harrison	42	D. C.	1906 23rd Street
†Manning, Thomas Ralph	45	Pa.	22 2nd Street, N. E.
Marthinson, Detlow Mainch	16¾	D. C.	1788 Columbia Road
Martin, Margaret E.	0	D. C.	417 Hobart Place
Mathews, Oscar W., B.S. in Agriculture; M.S., University of South Dakota	57	S. Dak.	Dept. of Agriculture
Mays, Harold Randells	0	Utah	No. 7, Newlands, Chevy Chase, Md.
Meese, Norman Sheridan	21¾	N. Y.	1916 16th Street

Name	*Credits*	*Legal Residence*	*Address*
Mentzer, Florence Eberly	29½	Pa.	605 North Carolina Ave. S.E.
Middleton, George Elmer	75½	D. C.	1428 R Street
Miller, Karl Willett	30	D. C.	44 V Street
Mottern, Albert Joseph	3	Ohio	1018 8th Street
*Moyer, Florence Willard	30½	D. C.	610 8th Street, N.E.
Munger, Hester Irene	23	D. C.	1618 N. Capitol Street
Nafziger, Raymond Earl	9	Neb.	813 21st Street
*Needham, Arthur E.	9	Mass.	War Department
Nelson, Norman Justin	43	N. Dak.	Y. M. C.A.
Nelson, Ruth J.	0	Wis.	2270 Cathedral Avenue
*Neumann, Louis Delmar	24	D. C.	1916 16th Street
Neumann, Meta A.	29	D. C.	701 A Street, S.E.
Northrup, Harold R.	0	D. C.	1346 Oak Street
Ostrow, Walter Wolf	31½	Va.	915 22nd Street
Overstreet, Ella Catherine	21	S. C.	316 E. Capitol Street
Overstreet, Walter	0	S. C.	216 E. Capitol Street
Owen, Amy A.	0	Wash.	621 Lexington Place, N.E.
Packer, Earl Le Noir	0	Utah	2006 F Street
Padgett, Mildred	12	D. C.	1726 Euclid Street
Paine, Ethel Charlotte	10	D. C.	510 Randolph Street
Park, Frances Louise	0	Mich.	807 Taylor Street
Parsons, Enith Alice	0	D. C.	3414 Newark Street
Partington, (Mrs.) Elizabeth Hamilton	60¼	Md.	Forest Glen, Md.
*Payne, James Stanley	33	D. C.	818 North Carolina Ave., S.E.
Peirce, Lois Emma	22½	D. C.	229 Pennsylvania Avenue, S.E.
Peter, Robert	0	Md.	Rockville, Md.
Petree, Harris Earle	0	Mo.	1824 H Street
Petrie, Mary Esther	0	D. C.	2815 6th Street, N.E.
Phoebus, Mildred Anna	41½	D. C.	1925 North Capitol Street
Pierce, Fay Elizabeth	37	D. C.	1748 Lamont Street
Preinkert, Alma Henrietta	43	D. C.	1511 L Street
Prettyman, Charles Wesley	0	D. C.	1308 Columbia Road
†Pou, Edwin Smith	5	N. C.	219 E. Capitol Street
*Price, James Richard	0	Ala.	122 East Capitol Street
Pugh, Louise Benton	0	D. C.	1802 R Street
*Racoosin, David	0	Va.	Cherrydale, Va.
Rappaport, Harry	0	N. Y.	39th Street and Windom Place
Ramsey, Herbert Percy	47	D. C.	813 Massachusetts Avenue N.E.
Ravenel, Henry	0	D. C.	1611 Riggs Place

Name	*Credits*	*Legal Residence*	*Address*
*Reagan, John Wesley	0	Texas	1502 14th Street
Reeves, George Torreyson	0	Va.	Ballston, Va.
Reigelman, Leon Jonathan	0	Pa.	10th Street, Congress Heights
Renner, Wilbert Vernon	37½	D. C.	1405 F Street
Reynolds, Francis Core	0	D. C.	3038 Dumbarton Avenue
Richardson, Elizabeth Laura	13½	D. C.	Congress Heights, D. C.
*Robinson, Ralph Verner	0	D. C.	728 20th Street
Rush, Lyle Virginia	14½	D. C.	119 Carroll Avenue, Takoma Park
Russell, Paul George	47½	N. Y.	3538 Warder Street
Ryan, Inez Buffington	0	D. C.	713 19th Street
St. Clair, Albert Thurston	39½	D. C.	Apartment 202, Carlisle Court
Saunders, Randall Nash	0	D. C.	1534 6th Street
Salant, (Mrs.) Annie	53½	D. C.	3429 34th Street
Schaaff, Martha Elizabeth	0	D. C.	1824 Monroe Street
Schellfeffer, Frank	17	Ill.	1108 New Hampshire Ave.
Schick, John Lloyd	0	D. C.	1346 Shepherd Street
Schoenfeld, Margaret H.	10½	D. C.	3448 34th Place
Scott, Howard	24	Md.	1715 Euchid Street
*Scott, William Ward, Jr.	0	D. C.	1800 Lamont Street
Seibold, Theodosia Darling	31	D. C.	756 Rock Creek Church Road
Seiler, Paul Basil	38½	N. J.	529 18th Street
†Selden, Paul Hubert	34	D. C.	1862 Park Road
†Smith, Homer Edward	0	Neb.	Y. M. C. A.
Smith, O. Thaxter	6	D. C.	5216 Illinois Avenue
Smith, William Parkhurst	0	Mich.	Y. M. C. A.
Snyder, Carl Francis	39	D. C.	1515 Buchanan Street
*Spamer, Carl Ober	49½	Md.	1769 Willard Street
Spamer, Frieda Lorenz	49½	Md.	1769 Willard Street
Stadtman, Claud Edward	39	Okla.	B & 5th Cavalry, Fort Myer, Va.
Stanton, Eleanor Winifred	15½	R. I.	3323 O Street
Stewart, Phyllis Patricia	8	D. C.	1812 Lamont Street
Stiefel, Dorothy Franc	18	D. C.	3157 Mt. Pleasant Street
Stimpson, Charlotte G.	0	D. C.	1708 Q Street
*Stitt, Edward Wynkoop	0	D. C.	1708 R Street
Stout, Jane Norman	35½	D. C.	1435 9th Street
Stow, Norman Chastian	0	D. C.	35 Q Street, N.E.
Styer, Ralph A.	10½	Pa.	1227 O Street
Taggart, Earl	45½	Kans.	1353 Park Road
Tait, Beatrice Wilkins	0	D. C.	1854 Ontario Place

Name	*Credits*	*Legal Residence*	*Address*
Tashof, Leon Anthony	21	D. C.	437 2nd Street, S.E.
Taylor, Olive Rodgers	0	D. C.	447 Randolph Street
Tepper, Benjamin Lionel	55	N. J.	3225 148 Adams Street
Terry, Leo Claude	49½	Pa.	2022 F Street
Thomas, Edith Wheelock	12	D. C.	3225 18th Street
Thomas, Lisle	33	Mich.	901 M Street
Thompson, May Atkinson	0	D. C.	1420 Irving Street
Tonne, William Henry	0	D. C.	610 I Street
Towers, Lemuel Appold	0	D. C.	1440 Belmont Street
Tunstall, John Liggate	16	D. C.	1736 Columbia Road
Ulrickson, Esther Margaret	16½	D. C.	617 21st Street
†Underwood, Eugene	8½	Ill.	1333 15th Street
Van Kirk, Lloyd Howard	39¼	Pa.	1885 Ingleside Terrace
Vander Broek, Gilbert	0	Mich.	1829 F Street
Van Petten, Harold	0	Ill.	House Office Building
Vaux, Catherine Louise	9	Pa.	1651 Newton Street
Voorhees, Elizabeth Aston	0	D. C.	3456 Newark Street
Waldenmaier, Bernadine	0	D. C.	1826 Lincoln Avenue, N.E.
Walker, Carol Louese	0	D. C.	20 16th Street, N.E.
†Weber, Henry Meyer	0	Md.	Mt. Ranier, Md.
West, Warren Reed	19	D. C.	304 D Street, N.E.
White, Helen Margaret	0	D. C.	1002 Nichols Avenue, Congress Heights, D. C.
Wilbur, Elizabeth Sabrina	34½	D. C.	1205 Columbia Road
Wilson, Elizabeth Webb	17	D. C.	316 B Street, S.E.
Wolf, Ethel	38	D. C.	626 22nd Street
Wong, Yuen Su	6½	China	2016 G Street
Working, Earl Booth	39½	D. C.	7100 5th Street
Wu, Ying	43½	China	2001 19th Street
Yater, Wallace Mason	18½	D. C.	811 8th Street N.E.

CANDIDATES FOR THE DEGREE OF BACHELOR OF SCIENCE IN CHEMISTRY

Alexander, David Lee	0	D. C.	436 Manor Place
Badger, Cecil Hammond	0	Pa.	509 4th Street
Bastian, William Charles	0	D. C.	1843 14th Street
Beauregard, Louis Vivian	0	D. C.	1517 33rd Street
Beck, George Robert	0	Md.	Bethesda, Md.
Boyle, William Augustus	22	D. C.	2032 F Street
Brashears, William Nathaniel	0	N. Mex.	The Atherton
Brattain, Paul Henry	15¾	Ind.	420 10th Street, N.E.
Breneman, Claude Royal	42	Penna.	1014 10th Street
*Brill, Julius	17½	D. C.	Public Library
†Brumbaugh, Glen Miller	15½	Ariz.	3001 16th Street, N.E.

Name	*Credits*	*Legal Residence*	*Address*
Bubb, John C., A.B., 1915 Washington and Lee University	45½	D. C.	719 9th Street, N.E.
Burton, Laurence Elmer	1½	Ind.	McLean, Va.
*Cassedy, Edwin Gray	0	D. C.	214 South Carolina Avenue, S.E.
Cathcart, Paul Hamilton	23½	Va.	2022 F Street
Claiborne, Samuel Homer	0	D. C.	30 Randolph Place
Coleman, Malcolm Austin	11½	Kan.	1916 16th Street
Cooper, George Spencer, Jr.	16½	D. C.	1819 Wyoming Avenue
Cross, Fred Sylvester	0	D. C.	1736 G Street
Daly, Adolph Augustus	0	D. C.	914 Maryland Avenue, N.E.
*Dieserud, Andrew R.	0	D. C.	216 Maryland Avenue, S.E.
Diesman, Justin P.	32½	Ky.	2130 I Street
*Donk, Peter John	57	D. C.	1706 F Street
*Dreyer, George Washington Charles	0	D. C.	1830 H Street
Engel, Abraham	49	N. Y.	1114 10th Street
*Farrell, Thomas Francis	0	Mass.	Navy Department
Finch, Ruy Herbert	11	Ohio	Y. M. C. A.
Fisher, Henry Wellen, Jr.	0	D. C.	3308 O Street
Fogle, Fred Matthew	17	D. C.	3715 Woodley Road
Ford, Florence Marian	37	Del.	1828 H Street
Galloway, Alfred Earl	28¼	Ohio	635 Y. M. C. A.
Gardner, Hannah Louise	0	D. C.	3367 18th Street
Garland, George Washington	14	D. C.	104 9th Stret, S.E.
Gerber, Simon	0	D. C.	1333 H Street
Gersdorff, Wilbur August	23	D. C.	1825 North Capitol Street
Goodman, Leopold A.	42½	Mass.	1744 Corcoran Street
Gordon, Daisy	5	Maine	The Cairo
Hamilton, Bonifant	18½	Tex.	3135 24th Street, N.E.
*Harrison, Arthur Pennoyer	21	Md.	1016 22nd Street
Hart, John Allen	10	Texas	814 22nd Street
Heindl, Raymond Albert	36½	Wis.	1016 22nd Street
Hellmuth, Everett Albert	14¼	Va.	108 North Alfred Street, Alexandria, Va.
Hough, Harry Johnson	0	D. C.	3036 Dent Place
Hummer, Aubrey Eugene	12½	D. C.	1131 8th Street, N.E.
Hurd, Willis L.	12¼	D. C.	1737 Park Road
Jackson, Oscar A.	0	D. C.	460 O Street
Kain, Helen Gladys	37½	D. C.	129 E Street
Karger, Theresa	39	D. C.	2616 Cathedral Avenue
*Kass, John	12	Mich.	Y. M. C. A.

Name	*Credits*	*Legal Residence*	*Address*
Kirkpatrick, James, Jr.	20½	Md.	Bethesda, Md.
Krafft, Carl Frederick	27	Wash.	1104 12th Street
Larsen, Archibald J.	61	Wis.	1223 12th Street
LeDuc, Percy W.	18	D. C.	4107 8th Street
Levy, Harry	13¼	D. C.	806 21st Street
McConkey, Mont	11	D. C.	904 M Street
MacEwen, Thomas Taylor	0	D. C.	529 Irving Street
Manock, John Kay	4½	D. C.	2034 G Street
Markley, Klare Stephen	14½	Md.	620 14th Street, N.E.
Maryman, James Edgar	25½	D. C.	1304 Emerson Street, N.E.
Middleton, Ellis Spear	6	D. C.	1834 Lamont Street
Miles, Helen Augusta	40¾	D. C.	1418 Rhode Island Avenue
Minor, Carl Olin	4	Iowa	Y. M. C. A.
Mitchell, John LeRoy	12	Pa.	1241 B Street, S.E.
Murray, Charles Nealy	0	D. C.	1637 W Street, S.E.
Nichols, Henry Janney	25	D. C.	3030 Q Street
Patterson, Harold Cameron	0	Md.	Indian Head, Md.
Paull, Elizabeth Aldridge	11	Va.	The Claremont
Phillips, George Washington	29	D. C.	612 18th Street
Proudley, Charles Earl	0	D. C.	21 R Street
Ramsdell, Paul Charles	14	D. C.	1945 Calvert Street
Reh, Emma	26	D. C.	1352 Good Hope Road
*Richardson, Howard Barrett	0	D. C.	132 10th Street, N.E.
Robey, Vivian Campbell Kelchner	0	Md.	Rockville, Md.
*Rosenbusch, William Traugott	0	D. C.	3336 P Street
Scala, Norman Philip	14	N. Y.	918 South Carolina Ave.
*Scales, Freeman Montague	34	D. C.	2813 Quarry Road
Schmidt, Reuben	36	D. C.	13 H Street
Schaffer, Jacob M.	6	N. Y.	1767 T Street
†Scully, George Clifford	0	Tex.	1326 L Street
*Sligh, William Hume	36	S. C.	Bureau of Standards
Shinnick, Herbert H.	0	Md.	Friendship Heights, Md.
*†Shoultes, Marvin A.	0	N. J.	128 F Street
Snider, George Gordon	34	Mich.	928 14th Street, Apartment 5
Stockett, Norman Joseph	16	D. C.	923 North Carolina Avenue, S.E.
Tashjian, Myron	0	Mass.	2034 G Street
Thawley, William Roland	7½	Md.	Laurel, Md.
Tonkin, William Henry	13	D. C.	2121 15th Street
Young, James Laurence	19	D. C.	2509 Wisconsin Avenue

BACHELOR OF SCIENCE IN MEDICINE

Name	*Credits*	*Legal Residence*	*Address*
Borden, Daniel LeRay, M.D., 1912, George Washington University	53¾	D. C.	The Rochambeau
Carmody, John Fulton	0	D. C.	1211 Vermont Avenue
Colonna, Frances Bindon	0	D. C.	140 B Street, N.E.
Conklin, Coursen Baxter, M.D., 1907, George Washington University	48	D. C.	1344 R Street
Davis, David	19	D. C.	1726 P Street
Glenn, J. Burton	0	D. C.	1440 Meridian Street
Herzmark, Maurice Hart	19	D. C.	1911 Pennsylvania Ave.
Hunter, Oscar Benwood, M.D., 1912, George Washington University	41½	Va.	2021 H Street
Joergensen, Hans	16	D. C.	812 East Capitol Street, S.E.
McChesney, Frank Marks	5	D. C.	129 Randolph Place
*Pagan, Albert Elwood, M.D., 1912, George Washington University	41	D. C.	1624 I Street
Schwartz, Abraham Theodore	6	D. C.	116 North Caroline Avenue, S.E.

PRE-MEDICAL

Name	*Legal Residence*	*Address*
Beck, Richmond James	D. C.	108 3rd Street, N.E.
Bowen, Wilbur Lorenzo	D. C.	1654 Hobart Street
Demopoulos, Christos John	Greece	309 9th Street
*Dowden, Ralph Wellington	D. C.	1010 Park Road
Duffie, Don Hastings	D. C.	Takoma Park
*Freeland, Fred Bernard	S. Dak.	2004 G Street
Griffith, Harold Moore	Pa.	16 4th Street, S.E.
Hayes, Thomas Hirst	Va.	307 S. Lee Street, Alexandria, Va.
Hollingsworth, Russell Kühner	D. C.	1364 Girard Street
Irani, Ardeshir Behram	India	1417 Park Road
King, Charlton R.	Ala.	620 A Street, N.E.

Name	*Legal Residence*	*Address*
Lawson, Edward Burnett	D. C.	206 13th Street, N.E.
Myers, Franklin Hammett	D. C.	3754 McKinley Street
*Nag, Robindra Chandra	India	2010 F Street
Nordlinger, George	D. C.	3113 N Street
Pole, Russell Frederick	D. C.	216 8th Street, N.E.
*Ryan, Frederick L.	Mass.	Theta Beta Phi House
Scaggs, George Warren	D. C.	1225 Franklin Street, N.E.
*Silverstone, Harry	D. C.	410 K Street
Simmons, William David	D. C.	1232 13th Street
Stretch, Clarence L.	Conn.	The Plaza Apartments
*Strobel, Julia Henry	D. C.	613 6th Street, S.W.
*Taylor, Evan, Jr.,	N. J.	938 K Street
Vestal, Paul William	D. C.	1102 13th Street
Williman, Frank Louis	Ill.	412 1st Street, S.E.

SPECIAL

*Abbott, James S.	D. C.	1355 Spring Road
Allen, Wallace Brown	Md.	Auditor's Building
*Altman, William Lee	S. C.	1121 I Street
*Anderson, Alexander Kocsis	D. C.	1681 31st Street
Anderson, Grace Levering	D. C.	3848 Woodley Road
Arthur, Austin Jackson	Md.	Capitol Heights, Md.
Avé-Lallemont, Ernest William	Wis.	1310 Euclid Street
*Bahr, Berthold	D. C.	Walter Reed Hospital
Ball, (Mrs.) Amalia Maeder	Colo.	1315 Clifton Street
Ball, Max Waite	Colo.	1315 Clifton Street
Ballman, Edna	D. C.	Takoma Park, D. C.
*Barrows, William Burnet	N. Y.	1736 G Street
*†Bartlett, Barbara	Pa.	150 Seaton Place
Bartsch, (Mrs.) Signe Charlotte Guerdrum	D. C.	1456 Belmont Street
Bauer, William Harrison, LL.B., 1914, LL.M., 1915, M.P., 1915, Georgetown University	Ohio	Y. M. C. A.
Beck, Howard Clinton, Jr.	D. C.	918 M Street
Becker, Peter Matthew, Jr.,	D. C.	1100 Vermont Avenue
Beckmeyer, Lillie M.	D. C.	1873 California Street
Belt, Artridge	Md.	Department of Agriculture
Benson, Chester L.	Md.	125 War Department
Bertenshaw, Annie Turner	Mass.	U. S. Geological Survey
Betker, Alice Francis	D. C.	1407 Doxall Road
Bitzer, Kathleen	Va.	615 Prince Street, Alexandria, Va.
*Bland, William T., Jr.	Mo.	2123 California Street

Name	*Legal Residence*	*Address*
Bloedorn, (Mrs.) Ellen May Howard	D. C.	Quarters K, Navy Yard
*Booker, Yelverton Evans, Jr.	Va.	1613 30th Street
Bose, Herbert	D. C.	1923 North Capitol Street
Boyd, William Edington	D. C.	1100 Virginia Ave., S.W.
Brewer, Elin Gilmore	D. C.	608 Massachusetts Avenue
*Britten, Rollo Herbert, A.B., 1912, Harvard University	D. C.	920 17th Street
*Broadbent, Ruth Dorothy	D. C.	112 Adams Street
*Brockman, William Everett	Va.	1012 B Street, N.E.
Brown, (Mrs.) Jeanne Wakefield	Md.	Garrett Park, Md.
Brown, Ralph Minthorne, A.B., 1901, Cornell University	D. C.	1324 Monroe Street
Brown, Wager Swayne	D. C.	5301 Connecticut Avenue
Buckingham, Edgar Cole	D. C.	201 2nd Street, S.E.
Burns, Mary Keith	D. C.	1224 13th Street
Cairns, Robert Scott	D. C.	1102 Virginia Ave., S.W.
*Caldwell, James F.	Ill.	2000 F Street
Carlson, Vivian	N. Y.	Apartment 61, The New Berne
†Carter, Agnes A.	D. C.	1314 B Street
Charles, George R.	D. C.	2805 Q Street
*Chester, Arline Elizabeth	N. C.	New Bloomfield, Mt. Pleasant Street
Clark, Earl P.	Wash.	1917 G Street
Clark, Frank Rinker, S.B., 1910, University of Utah	Utah	1346 Parkwood Place
Clover, Mary Eudora Miller	D. C.	1535 New Hampshire Ave.
Collins, (Mrs.) Elinore Waldron	D. C.	The New Berne
*Compton, Rowena U.	D. C.	207 East Capitol Street
*Connolly, B. Teresa	D. C.	1843 California Street
Cook, Robert Carter	Md.	Lanham, Md.
*Cooksey, Alice French	D. C.	1311 Euclid Street
Coon, (Mrs.) Nellie Turner	Pa.	1236 11th Street, Apartment 32
Crews, Chalsia E.	Mo.	2106 F Street
*Daly, Richard M.	Ark.	1221 Girard Street
Davis, Harold Reinberg	D. C.	3479 Holmead Place
*DeMass, Lura G.	D. C.	1226 Laurence St., N.E.
*Dougherty, J. K.	D. C.	1416 Chapin Street
Doyle, Roscoe Clifford	D. C.	2022 F Street
*Drolsbaugh, Chauncey B.	Pa.	Walter Reed General Hospital
*DuBose, Harriet Elizabeth	D. C.	1838 Calvert Street

Name	*Legal Residence*	*Address*
Dufour, Arline	D. C.	1343 L Street
Dull, John Wesley	D. C.	2129 F Street
*Dunnington, Frank	D. C.	624 North Carolina Ave., S.E.
†Dupré, Edith Garland	La.	The Montana
*Duvall, William A.	D. C.	1722 Willard Street
Dyer, Jesse Farley	D. C.	Navy Department
Eaton, Frank M.	Neb.	1826 G Street
Egbert, (Mrs.) Rica B.	D. C.	1739 1st Street
Ellison, Minnie Duffey	D. C.	Patent Office
Emig, Gladys Dromgold	D. C.	1765 P Street
Enoch, Adaline Sheldon	D. C.	416 B Street, N.E.
Evenson, Oscar Ludwig, A.M., 1915, Columbia University	D. C.	1723 G Street
Farrell, Agnes M.	D. C.	1424 Clifton Street
Fay, Helen	D. C.	3 Kendall Green
Federline, Andrew Paul	D. C.	902 Hibbs Building
*Field, Martha E.	Md.	Woodside, Md.
Finch, Elmer Harrison	Mich.	U. S. Geological Survey
*Fisher, Theodore Monroe	Va.	318 Maryland Ave., N.E.
*Forbes, Charles Sidney	D. C.	Kensington, Md.
Forsythe, Grace Laetitia	D. C.	2307 Washington Circle
Fortier, Winifred Reid	D. C.	2310 19th Street
Fowle, Philip R.	D. C.	1632 S Street
Fox, Elizabeth Gordon, A.B., 1907, University of Wisconsin	D. C.	2506 K Street
Fox, Paul J., S.B., University of Chicago	D. C.	Bureau of Soils
*Francis, Marshall H.	Ohio	1315 K Street
French, William Thomas	Va.	Cherrydale, Va.
‡Friend, Rose K.	Ind.	9 4th Street, N.E.
Gardner, Ella	D. C.	3367 18th Street
Garver, Roy Olin	Ill.	1830 G Street
*Geer, Marguerite A.	N. Y.	1133 Euclid Street
Gerbert, Gertrude	D. C.	1334 Fairmont Street
*Gertlin, Maurice	D. C.	411 Post Office Dept.
Gibson, Katherine McClellan	D. C.	1459 Monroe Street
†Gicgine, Victor L.	D. C.	1229 Monroe Street
Gladstone, Harry	D. C.	1748 8th Street
Godfrey, George Harold, B.S., 1913, Washington State College	Utah	1404 15th Street
Godson, (Mrs.) Josepha Boyd	D. C.	3014 Dent Place

Name	*Legal Residence*	*Address*
Goforth, Herndon Ware	D. C.	2112 F Street
*Goodrich, Hattie Estelle	D. C.	724 F Street
Gorman, Clyde Dale	Pa.	1211 Euclid Street
Graham, H. Wayne	Ohio	2003 G Street
Gray, Shirley E.	Ill.	1444 Harvard Street
Greene, Lemuel Eugene	D. C.	1435 K Street
Gross, Robert Frank, Graduate, 1907, United States Naval Academy	Cal.	105 Woodward Apartments
*Guy, John Michael	D. C.	1010 New Hampshire Ave.
Hale, Marion	Iowa	1302 Irving Street
‡Harlow, Mary H.	D. C.	1979 Biltmore Street
*Harnsburger, Thomas Kennedy	Va.	U. S. Geological Survey
*Harrison, Ruth M.	D. C.	2208 1st Street
Harry, Edward B.	D. C.	4715 River Road
*Harry, Ida A.	D. C.	4715 River Road
Hayden, Margaret	D. C.	1824 G Street
Hays, Grace D.	D. C.	1858 Columbia Road
*Henckels, Theodora Katherine	D. C.	The Mendota
Hendrickson, Lydia	D. C.	1638 15th Street
Herzmark, Rebecca	D. C.	1911 Pennsylvania Avenue
Hildebrand, Jesse R.	D. C.	233 2nd Street, S.E.
Hillyer, Grace	D. C.	3848 Woodley Road
Hirose, Yenji	Japan	1300 Vermont Avenue
*Hole, Myra Cadwalader	D. C.	2138 California Street
†Hollister, Mabel Pfrimmer	D. C.	1338 Oak Street
*Howell, (Mrs.) Claire Young, A.B., 1907, University of Utah	Utah	1882 Columbia Road
Huddle, Jerome Klahr	Ohio	1312 L Street
†Huff, Charles R.	Minn.	1736 G Street
*Hundley, (Mrs.) Elizabeth Hill	Mo.	2003 Columbia Road
*Hunt, Estelle Josephine	D. C.	2618 Garfield Street
Hunt, John Franklin	Okla.	1100 Vermont Avenue
Hyakutake, Gengo	Japan	The Westchester
Jackson, Thomas Jefferson	D. C.	1810 N Street
Janson, Hilda Eberly	D. C.	3118 16th Street
Jelleff, (Mrs.) Eleanor Porter	D. C.	3360 Mt. Pleasant Street
John, (Mrs.) Lillian Noël	D. C.	117 Willow Avenue, Takoma Park, D. C.
Johnson, (Mrs.) Grace Dean White, S.B., 1908, New York University	Md.	Bethesda, Md.
Jordan, Thomas Guy	Miss.	211 S Street
Kamrass, Benjamir	N. Y.	106 I Street

Name	*Legal Residence*	*Address*
Kaulbeck, Clarence L.	D. C.	Interstate Commerce Commission
Kawashenia, Nobularo	Japan	1310 N Street
Keefauver, Lester Summers	Md.	Berwyn Md.
Ketcham, Anna Marie A.B., 1904, Smith College; D.O., 1907, Philadelphia College of Osteopathy	D. C.	1806 H Street
Khan, Mohsen	Persia	1719 Connecticut Avenue
Khan, Naghi	Persia	1719 Connecticut Avenue
*Kreiselman, Joseph	Ohio	917 15th Street
Kresge, Clyde Lafayette	D. C.	620 14th Street, N.E.
Kohl, Arthur P.	Iowa	1331 M Street
*Kubel, Herbert Graham	D. C.	1000 East Capitol Street
*Ladd, Katharine	D. C.	1781 Columbia Road
Lane, Rufus Herman, Graduate, 1891, United States Naval Academy, LL.B., 1895, George Washington University	Ohio	2310 20th Street
Lasley, William Albert	N. C.	941 H Street
Lee, Wallace M.E., Colorado School of Mines	Mo.	U.S. Geological Survey
Lent, Margarete	D. C.	1528 Corcoran Street
*Leupp, Ethel Louise	D. C.	1813 16th Street
Lewis, Floyd Emerson	D. C.	1103 Florida Avenue, N.E.
Lewis, Sadie Leigh	D. C.	718 Taylor Street
Lightfoot, Edward Bain	Va.	Arlington, Va.
*Lind, Guy E.	Ill.	1630 P Street
Lippincott, Priscilla A.	D. C.	2122 LeRoy Place
Loebel, Stephanie	D. C.	1304 L Street
Love, Ellen Lane	D. C.	910 Massachusetts Ave.
Lowry, Mamie	D. C.	1472 Harvard Street
*Lufburrow, Norman Alfred	N. J.	611 5th Street, N.E.
*McBride, Charles J.	Del.	908 M Street
McClellan, Edwin North	Pa.	3 East Kirk Street
McClintock, Laura Madeline	Pa.	Bureau of Fisheries
McCoy, John Scott	D. C.	312 McLean Avenue, S.W.
McGee, Mary L.	Utah	300 East Capitol Street
McIndoo, Norman Eugene	D. C.	440 Kenyon Street
McKinney, Stephen Booth, Graduate, 1907, United States Naval Academy	Tenn.	The Dupont
McLean, Ridley	Tenn.	Navy Department

Name	*Legal Residence*	*Address*
Mactier, Anna Lawrence	Md.	Chevy Chase, Md.
Mains, Gerald Harper, S.B., 1914, Michigan Agricultural College	Mich.	Y. M. C. A.
Mangus, James	N. Y.	1736 G Street
Marbut, Musa	N. C.	Kendall Green
*Marmer, H. A.	D. C.	4200 Harrison Street
*Marsh, Harold Newman	Maine	1204 Massachusetts Ave.
Melander, V. Rosa	Conn.	1204 Massachusetts Ave.
Menzel, Margaret Laura	D. C.	1920 G Street
Middleton, Isabel	D. C.	1736 Corcoran Street
Miller, (Mrs.) Polly	D. C.	The Rochambeau
*Miller, Walter Lowry	D. C.	4423 8th Street
Miner, Helen	Ohio	1613 Irving Street
Minick, George Vail	D. C.	300 11th Street, S.E.
Mitchell, Mary Martha	D. C.	718 East Capitol Street
Moore, Arthur Allston	D. C.	2421 M Street
Moore, (Mrs.) Elizabeth Fox	D. C.	The Wyoming
‡Moreland, (Mrs.) Edwina	D. C.	Portland Hotel
Mulvey, James H.	Ky.	Y. M. C. A.
Munroe, George Treadway	Utah	1617 Swan Street
Negrotto, Sidney Hamlet	D. C.	Library of Congress
Nelson, Axel	Minn.	655 American Bank Bldg.
Nelson, Ina Forrest	W. Va.	1308 Belmont Street
Neuman, Harry Anderson	D. C.	808 Maryland Ave., N.E.
Neumann, Frederika, A.B., 1915 George Washington University D. C.	D. C.	701 A Street, S.E.
Nicklin, Russel Granville	Va.	319 South Pitt Street, Alexandria, Va.
Nomura, Kichisaburo	Japan	The Benedick
Norman, Caroline Blair	Md.	916 17th Street
Nugent, Hollis J.	Va.	218 North St. Asaph Street, Alexandria, Va.
Ossire, Cora Amelia, A.B., 1913, A.M., 1915, George Washington University	D. C.	2729 Ontario Road
†Outwater, (Mrs.) Kate Sorrell, A.B., 1913, S.M., 1915, George Washington University	D. C.	620 F Street, S.W.
Pahl, Leopold Fredrich William	D. C.	Congress Heights
Park, Louise	Mich.	1511 13th Street
Patrick, (Mrs.) Nelle Freeland	Mo.	1814 G Street
Peet, Elizabeth	D. C.	Gallaudet College

Name	*Legal Residence*	*Address*
Peirce, Lottie M.	Md.	229 Pennsylvania Avenue, S.E.
*Pendell, Lyman Elmer	N. Y.	2032 F Street
*Pennebaker, James Y.	D. C.	3021 Q Street
*Perkins, William C.	D. C.	1530 6th Street
Peterson, Alvin Ray	Ill.	Federal Trade Com.
*Poast, Florence Maude	Neb.	Smithsonian Institution
Postley, Olive C.	D. C.	1362 Irving Street
Putnam, Pearl Augusta	Va.	Clarendon, Va.
Radhe, Nils Gunnar	Sweden	2210 R Street
Reitzel, Albert E.	N. C.	1302 L Street
*Rhoads, Thomas William	Pa.	1121 I Street
*Rice, Ruth Katherine	D. C.	2217 Q Street
Ries, Carl A. H.	D. C.	812 C Street, S.E.
Rogers, Ralph Marvin	D. C.	1761 Columbia Road
†Rosenthal, (Mrs.) Olga Judith	Wis.	1437 Rhode Island Avenue
Rutter, (Mrs.) Janet Stevens	D. C.	1442 Belmont Street
Saito, Hiroshi	Japan	1310 N Street
Schiffer, Marie Veronica	Mich.	U. S. National Museum
Schissel, Frank	N. Y.	510 2nd Street
Schneider, Florence	Va.	The Cairo
Shaffer, Joseph Meyer	Mass.	1744 Corcoran Street
Sheckells, Lena E.	D. C.	3314 Brown Street
Shefferman, Nathan W.	D. C.	719 11th Street
Sheffield, Edgar Lee	D. C.	806 18th Street
Shelsé, Helen	D. C.	The Balfour, 16th & U Streets
*Shepard, William Wallace	Cal.	2011 Columbia Road
Shuman, (Mrs.) Mary Barber Crandall	N. J.	3519 14th Street
Simpson, Julian D.	D. C.	2439 Ontario Road
Simpson, Mary Kirk	Va.	1212 34th Street
Smith, Alice L.	N. Y.	205 Linworth Place, S.W.
*Smith, Arthur R.	Md.	Pension Bureau
Snyder, Peter Frederick	Wash.	397 House Office Building
Snowden, Elizabeth Victoria	D. C.	1822 Ingleside Terrace
Sparrow, Herbert George	D. C.	521 The Ontario
Spaulding, Thomas Marshall, A.B., 1905, University of Michigan Graduate, 1905, from U. S. Military Academy	Mich.	1609 22nd Street
Spear, Albert Austin	D. C.	46th Street, N.E.
*Stahr, Walter	D. C.	1812 G Street

Name	*Legal Residence*	*Address*
Staton, Adolphus, Graduate 1902, U. S. Naval Academy	N. C.	Navy Department
Stein, Hattie	D. C.	26 Conrad Apartment
Stevens, (Mrs.) Mary Channell	D. C.	2831 27th Street
Sturtevant, Georgia Anna	D. C.	2233 Q Street
*Sullivan, Helen Clare	D. C.	2306 1st Street
Sutherland, Mabel Caroline	D. C.	227 E. Street
Swanson, Henry A.	N. Dak.	Y. M. C. A.
*Sweeney, Alma Beatrice	Va.	Box 243, Clarendon, Va.
*Swift, Katherine C.	Pa.	States Relations Service, U. S. D. A.
Swoboda, Charles Alois	D. C.	Walter Reed General Hospital
Tasker, Viola	Pa.	629 C Street, N.E.
Taylor, Bertha Elmore	D. C.	2129 18th Street
Taylor, Jane Brockenbrough	W. Va.	2013 G Street
Tesche, Leo Mortimer	D. C.	508 I Street
Thompson, Elizabeth Noyes	D. C.	1523 New Hampshire Ave.
Thompson, George Dixon	D. C.	3155 19th Street
*Tibbets, Lyman Brooks	D. C.	Childrens Hospital
Toner, Carrie Estelle	D. C.	3033 16th Street
Ullman, Elsie	Ohio	311 C Street
*Ulrich, Susanne C.	D. C.	The Burlington
Upton, Helen Elizabeth	Mass.	1114 Woodward Building
*van Benschoten, Homer Whitney	Mass.	404 Metropolitan Bank Building
*Van der Veer, Norman Reeve Graduate, 1908, U. S. Naval Academy	D. C.	Navy Department
Van Wagoner, John D., LL.B., 1915, George Washington University	Utah	Y. M. C. A.
Van Waters, Sherwood Page	N. Y.	1119 O Street
*von Zielinski, Carl Maria Johann, A.B., 1913, A.M., 1914, George Washington University	Va.	Department of State
*Veach, Robert Spangler	Va.	1300 Pennsylvania Avenue
Viehmann, Catherine Marie	D. C.	456 K Street
Wade, Roy Walter	Mo.	2439 N Street
Walter, Theodosia Josephine	D. C.	3300 O Street
*Walter, Wallace Wilson	D. C.	1724 21st Street
Wanlass, (Mrs.) Eva Page	D. C.	2106 F Street
*Warden, Mary Ashby	D. C.	The Wyoming
Webster, (Mrs.) Anna	D. C.	The Brighton

Name	Legal Residence	Address
Westover, Harvey Leroy	N. Y.	123 V Street
Wilcox, Edward L.	D. C.	907 B Street, N.E.
Willard, Nana Beatrice	D. C.	623 M Street
White, Walter N	D. C.	1466 Rhode Island Avenue
Wolf, George Peter	D. C.	28 9th Street, N.E.
*Wood, Dorothy Grace	D. C.	3301 Highland Place
*Wood, (Mrs.) Grace Burchell	D. C.	3301 Highland Place
Woodin, Gertrude See	D. C.	1360 Irving Street
Yoakam, (Mrs.) Annie Thayer A.B., 1900, Bryn Mawr College	D. C.	2023 O. Street
Young, (Mrs.) Augusta Freeman	N. Dak.	1801 K Street
Young, Margaret V. Olive	Ohio	2230 Massachusetts Ave.
Zapoleon, Louis B.	D. C.	2523 14th Street
Zuckerman, Samuel Godfrey	D. C.	1102 13th Street

COLLEGE OF ENGINEERING

CANDIDATES FOR THE DEGREE OF BACHELOR OF SCIENCE IN ARCHITECTURE

Name	Credits	Legal Residence	Address
Brandt, Warren Fisher	0	Pa.	22 2nd Street, N.E.
Carey, John Joseph	0	D. C.	1703 North Capitol Street
Carpenter, Clarence Forrest	37	Ind.	2028 G Street
Chapman, John Holbrook	10	D. C.	3323 Wisconsin Avenue
Conboye, William Thomas	29	Cal.	311 M Street
Coulon, Eugene Enet	15½	La.	1801 K Street
Daidy, George Augustine	10	Mass.	1202 N Street
Edwards, Thomas Rives	10½	D. C.	220 9th Street
Farnham, Arthur Blanchard	33½	D. C.	1774 U Street
*Flemer, Henry Lewis	47	D. C.	701 Maryland Ave., N.E.
Goddard, Arthur Herbert, A.B., 1913, Haverford College	29	Mass.	718 19th Street
Hicks, Gilbert Henry	0	Md.	210 Holly Avenue, Takoma Park, Md.
Koetz, Katherine	14½	Pa.	1828 Park Road
*Le Vey, Herman Bernard	0	D. C.	1123 13th Street
Lippitt, Edward Gardner	0	D. C.	125 11th Street, N.E.
Roberts, Reginald Van Vleet	0	Md.	110 Willow Avenue, Takoma Park, D. C.
Starr, Arthur Price	5	N. Y.	120 Randolph Place
Stutler, H. Ward	51½	W. Va.	Treasury Department
Taylor, William Waverly, Jr.	0	D. C.	404 B Street, N.E.
Weber, John Augustus	43	Pa.	327 10th Street, S.E.

CANDIDATES FOR THE DEGREE OF BACHELOR OF SCIENCE IN CIVIL ENGINEERING

Name	*Credits*	*Legal Residence*	*Address*
Abramson, Nathan	32½	D. C.	1001 New Jersey Avenue
Bernstein, Edgar Herbert	16	Tex.	Cherrydale Rural Station, Washington, D. C.
Blakely, Charles Francis	9½	Nebr.	401 Southern Building
Bowen, Seth Thomas	44	Ohio	War Department, Room 64
Buchanan, James Allison	15	D. C.	901 M Street
Capper, Harry Walter	31	Va.	219 8th Street, S.E.
Chamberlain, Guy Carleton	14½	N. Mex.	2011 Columbia Road
†Clarke, Herbert Charles Oliver	15½	Cal.	Coast and Geodetic Survey
Cole, Hazen Eugene	0	D. C.	639 East Capitol Street
*Colman, Henry Leonard	0	D. C.	3220 13th Street
Cottrell, Casper Lehman	0	Pa.	2140 G Street
Davis, Watson	16	D. C.	900 11th Street, S.E.
Deck, Frederick Webster	16	D. C.	1010 B Street, S.E.
Degenhardt, George Albert	62½	Pa.	1007 24th Street
Draper, Chester Robert	2	D. C.	1362 Parkwood Place
Dutton, Harold Harrison	0	D. C.	1721 Kilbourne Place
Ewing, Paul Albert, A.B. 1907, University of Nebraska	20½	D. C.	1323 Clifton Street
Finley, James Randlett	0	D. C.	2704 Ontario Road
Funkhouser, Charles Munroe	16	N. J.	Y. M. C. A. Building
Hafford, Thomas Ambrose	24½	N. Y.	1215 O Street
Hance, William Slocum, Jr.	16	D. C.	2031 Park Road
Harsch, Raymond	4	Ohio	1318 Maryland Ave., N.E.
Hauser, Leon Aaron	28	N. J.	2002 G Street
Haynes, Herold	8	D. C.	Library of Congress
Hunter, Clarence Sumner	9	Mass.	R. F. D. No. 4, Box 99, Washington, D. C.
Jackson, William Isaac	5	Ill.	405 Y. M. C. A.
Jensen, Clarence G.	14	Nebr.	1702 F Street
Johannessen, Walter	45	Tex.	2113 N Street
Johnson, Thomas Rogers	0	D. C.	2433 Ontario Road
Lenovitz, Jacob Leon	0	Md.	3012 Q Street
Magruder, Oliver Graham	55½	D. C.	765 Quebec Street
Marks, Joseph M.	6½	D. C.	1425 East Capitol Street
Miller, Odver Harrison	27½	Okla.	2022 F Street
Mills, Robert Rourke	8	D. C.	134 R Street
Morse, Edmund Cooper	0	Va.	926 17th Street
Nettleton, Walker Orin	1	D. C.	1746 Euclid Street
Ostrow, Maxwell Abbeshouse	0	Va.	915 22nd Street
*Pullen, Albert B.	0	Tex.	1325 M Street

Name	*Credits*	*Legal Residence*	*Address*
Reid, James Osborne	7½	La.	1813 F Street
Richard, Charles Bailey	54½	D. C.	1844 Columbia Road
Rose, Leonard Julian	34	D. C.	708 19th Street
*Sale, Prentiss Dixon, Jr.	67	D. C.	225 8th Street, N.E.
Scheer, Andrew Fred Ernest	0	Iowa	1008 N Street
Schmitt, Edwin Alexis	22	D. C.	305 Southern Building
*Shipley, Paul Reuben	0	D. C.	1510 R Street
Stroop, David Vincent	14	Md.	2112 F Street
Teller, Leslie Wayne	16	Mich.	4012 7th Street
Varney, Forrest Franklin	15½	Wisc.	209 Y. M. C. A.
Wadhams, Moses Allyn	54	Conn.	5408 9th Street
Walters, Marion Irven	12½	D. C.	3238 Warder Street
Ward, Heman Smith	0	D. C.	1321 11th Street
Wilder, William Franklin	6	N. J.	109 Chestnut Street
Wingate, Abram Reber, Jr.	0	D. C.	2641 Garfield Street
Yingling, Clinton Kemp, Jr.	1	D. C.	1105 17th Street

CANDIDATES FOR THE DEGREE OF BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

Aman, Walter Frank	11	Md.	Mt. Ranier, Md.
Ames, Norman Bruce, B.S. in E.E., 1915, Mississippi Agricultural and Mechanical College	60	Va.	615 Keefer Place
Bessling, Edward Norwood	6½	D. C.	451 Massachusetts Avenue
Biggs, Zeno Alvin	2	Md.	917 H Street
Brand, Albert Arnold	61	Ind.	1477 Newton Street
Brown, George M.	0	N. Y.	In care of U. S. Soldiers Home
Campbell, Arthur B.	37½	D. C.	126 Rhode Island Avenue
*Dust, William Henry	0	Mich.	615 19th Street
Faist, Carl J.	0	Mich.	Y. M. C. A.
Fehr, John Ralph, LL.B., 1913, George Washington University M.P.L., 1913 Georgetown University	58	Ill.	917 18th Street
Fischer, Melvin Ferdinand	45	D. C.	1006 Massachusetts Avenue N. E.
Folger, Willie Belt	0	S. C.	1313 K Street
Gaus, George Emil	1½	N. Y.	1132 8th Street
Hall, George Thomas	12	Md.	Hyattsville, Md.
Harding, Raymond Barton	11½	Va.	626 G Street, S.W.
Heron, Louis Mann	48	D. C.	1440 R Street
Hodgkins, Harry Grant, Jr.	12½	Md.	1330 Belmont Street

Name	*Credits*	*Legal Residence*	*Address*
Kalupy, Harry Harold, LL.B., M.P.L., 1914, Georgetown University	5	La.	2004 G Street
Klopfer, Lewis White	16½	D. C.	6404 Georgia Avenue
Ksanda, Charles	15	D. C.	2019 Park Road
Michael, Spencer B.	1	D. C.	18 New York Avenue, N.E.
Orlando, Vincent James	0	D. C.	234 1st Street, S.E.
Schladt, George J.	54	Md.	Potomac Heights, D.C.
Shoemaker, Fred Eugene	24½	D. C.	147 T Street
Smith, McClain Barnitz	58	D. C.	658 Morris Street, N.E.
Tennyson, Alfred Lionel	0	D. C.	1512 30th Street

CANDIDATES FOR THE DEGREE OF BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

Basseches, Jacob Thomas	11	N. Y.	1767 T Street
Bradley, Maurice Byron	24	D. C.	60 S Street
Brady, John Bernard	1	Md.	Somerset, Bethesda, Md.
*Brookes, William Brockenbrough Newton	11	D. C.	1632 17th Street
Clayton, Harold Oliver	2	D. C.	715 Lawrence Street, N.E.
Cruickshanks, Benjamin Carpenter	23½	D. C.	1700 15th Street
Degnan, George A.	31½	Pa.	450 M Street
*Delany, James Leroy	10½	D. C.	600 Park Road
Dement, George Earl	0	D. C.	937 5th Street, N.E.
Dowell, Edgar Franklin	8	Va.	Y. M. C. A.
Ehrman, Herbert Allan	32½	Md.	1328 Fairmont Street
Hale, MacFarland	14	Iowa	1302 Irving Street
Heald, Roy Haines	28½	D. C.	1524 Caroline Street
Ingram, Charlton Weber	3	D. C.	713 Taylor Street
James, William Stubbs	52½	D. C.	1504 R Street
Johnson, Clair Villiers	11	Iowa	1532 A Street, N.E.
Karnes, James Carberry	0	D. C.	21 R Street, N.E.
*Kirchner, Lester Frank	7	D. C.	1638 6th Street
Martin, Frank Whitcher	19	D. C.	60 M Street
Myers, Charles Mellis	5	D. C.	649 Maryland Avenue, N.E.
Norris, Howard Dutton	3	D. C.	2121 O Street
Paland, Ernest Otto	0	D. C.	1026 K Street, N.E.
*Patrick, Ermin Chambers	5	D. C.	600 23rd Street
Perry, Oliver Hazard	14½	D. C.	203 Seaton Place, N. E.
Petrie, John Shontz	15	Pa.	2815 6th Street, N.E.
Pope, George Samuel	61	D. C.	1321 East Capitol Street
Preston, Elliott Donald	14½	Nebr.	1438 Ames Place, N.E.

Name	*Credits*	*Legal Residence*	*Address*
Ranno, Dwight Boutwell	0	D. C.	"The Watkins," Takoma Park, D. C.
Richard, Frank Thomas	33½	D. C.	1860 Mintwood Place
Smith, McNeir	7	D. C.	1246 Irving Street
Spalding, John Dominic	2	D. C.	413 12th Street, N.E.
Stewart, John Malcolm	0	Va.	Ballston, Va.
Strawn, Floyd L.	7½	D. C.	1408 Girard Street
Talbott, Barnett Thomas	0	D. C.	1918 I Street
Wilson, Joseph Henry	30	Pa.	1436 W Street, Apt. 31
Woodward, Francis Albert	44	D. C.	751 Quebec Street

SPECIAL

Name	*Legal Residence*	*Address*
Almon, Harry Foster	Mont.	719 11th Street
Ambrosi, Hugo Faust	D. C.	647 G Street, S.E.
†Bealle, Charles Richard	Md.	606 M Street
Benson, Charles Greenwood	Ga.	341 Bryant Street
*Beresford, Robert Francis	D. C.	1601 O Street
Bowyer, James Ernest	S. D.	Berwyn, Md.
†Boyd, Joseph Reginald	D. C.	1360 Parkwood Place
Browne, Leslie Howard	D. C.	1112 13th Street
Brownell, Dorothea DeWolf	R. I.	The Cairo, 16th & Q Sts.
Bryan, Milton Joseph	D. C.	The Portner, 15th & U Streets
Burgess, James Irving	D. C.	403 11th Street, S.E.
Campfield, Allan Bailey	D. C.	3317 O Street
Conlon, Thomas Aloysius	D. C.	3512 O Street
Connor, Fred Wallace	Maine	Seaman's Quarters, Navy Yard
Cook, John Augustus	D. C.	1345 Valley Place, S.E.
Craton, Richard Washington, Jr.	D. C.	1410 Girard Street
Crawford, Harold Lee	D. C.	142 Kentucky Avenue
Cummings, Homer Hatton	D. C.	608 North Carolina Ave.
Dickinson, Julian Allen	D. C.	The Toronto
Eliason, Raymond Orlando	D. C.	Riverdale, Md.
Ervin, Guy	Iowa	537 Shepherd Street
Ferguson, Frederick	Mass.	Apartment 402, The Boydon, 1619 R Street
Fisher, John C., Jr.	N. Y.	Y. M. C. A.
†Fowler, Alvah Tennant	N. H.	U. S. Geological Survey
Freark, Clarence Hobart	Ill.	800 10th Street
Freemire, Leroy H.	N. Y.	2127 K Street
*Furey, Edward William	D. C.	U. S. Navy Yard
*Galbraith, Robert Karl	D. C.	1735 1st Street

Name	*Legal Residence*	*Address*
*Gates, Elmer Hovenden	D. C.	3100 16th Street
†Gibbons, Charles David	D. C.	1421 Columbia Road
†Glaze, Harry Smith	Ill.	1101 13th Street
*Goo On, Clement Rowland	Hawaii	5 Grant Place
Gray, Walter Thomas	D. C.	27 Maple View Place, S.E.
Harden, Fred Geer, A.B., 1907, A.M., 1908, University of Nebraska	Nebr.	1468 Harvard Street
Harris, Beverly Humphreys,	D. C.	1943 Biltmore Street
Harsch, Erwin, B.S. in C.E., 1915 George University Washington	Ohio	U. S. Coast and Geodetic Survey
Henrickson, Henry Brenton	R. I.	Bureau of Standards
*Hooker, Seth Delmont	N. C.	1331 Fairmont Street
Hunt, Paul Jamison	D. C.	1204 Girard Street
Ingham, James Ryle	D. C.	Apartment 22, 1730 M St.
*Joers, Rudolph Joseph, Graduate, 1909, U. S. Naval Academy	Mo.	U. S. Coast and Geodetic Survey
Judge, John Patrick	N. J.	1530 East Capitol Street
Kaiser, Edward J.	D. C.	331 13th Street, S.E.
Karrick, James Lawson, Jr.	D. C.	2120 Bancroft Place
Kotterman, Chester A.	D. C.	2611 Adams Mill Road, Apartment 43
†Kuehn, Herman A., B.S. in C. E. 1915, George Washington University	D. C.	3630 Georgia Avenue
Leland, Leonard Jesse	D. C.	Arundel Apartments, 6th and A Streets, N.E.
Little, Robert Ethan	La.	1736 G Street
Love, James Willard	Okla.	1826 G Street
*Martin, James Albert	D. C.	3304 Alabama Ave., S.E.
†Maxson, Louis Archer A.B., 1913, S.M., 1915, George Washington University	Md.	Room 325, Patent Office
Mifflin, Edward Laurie, Jr.	Pa.	708 19th Street
*†Moncure, Thomas H.	Va.	1495 Newton Street
Moore, James Ballard, LL.B., 1913 George Washington University	D. C.	1769 Columbia Road
Morris, Guy Turner, M.E., 1912, Cornell Universiy	Mo.	2625 Garfield Street
Morrison, Lloyd Albert	D. C.	3211 O Street
Muir, Arthur	Tenn.	2123 F Street

Name	*Legal Residence*	*Address*
Nettleton, Leigh Lanman, LL.B., 1912, George Washington University	Utah	2411 Pennsylvania Avenue
Nickel, William	Colo.	Apt. 61, The Brunwsick
Nickerson, Arthur Rogers	D. C.	26 Bryant Street
Offutt, Magruder Willson, Jr.	Md.	Bethesda, Md.
*Parker, Walter MacFarlane	D. C.	100 4th Street, S.E.
Paterson, George, D.D.S., 1912, Georgetown University	N. Y.	1441 Girard Street
Peircey, Ernest Richard	D. C.	14 10th Street, N.E.
Prastka, Anthony	Iowa	U. S. Navy Yard
*Purdie, Kenneth Sinclair, B.S. in C.E., 1912, Virginia Military Institute	Va.	Y. M. C. A.
*Ralls, Oscar Blount, Jr.	Ala.	1914 Pennsylvania Ave.
Reed, Frank Simon	D. C.	323 H Street, N.E.
*Richmond, Samuel Lockwood	Pa.	Ordnance Office, War Department
Riggs, Loffa Washington	Tenn.	306 C Street
*Rowe, Cecil J.	Ohio	In care of Civil Service Commission
*Satterfield, Raymond L.	D. C.	2214 Nichols Avenue, S.E.
Scharf, Edward Galura	Ala.	2603 Mozart Place
Schmied, James William S.B., 1910, Ohio Northern University; LL.B., 1915, George Washington University	Ohio	18 Iowa Circle
Schneider, Henry Adam	Mo.	2127 G Street
Shafroth, John Franklin, Jr. Graduate, 1908, U. S. Naval Academy	Colo.	1884 Columbia Road
*Shattyn, Henry S.E. 1913, College of City of New York	N. Y.	1132 7th Street
Shipley, Joseph Wilson	Md.	Hyattsville, Md.
Siebel, William Lawrence	D. C.	1727 North Capitol Street
Slifer, Milton Hugh	D. C.	Apt. 42, The Montgomery
Small, John Henry, Jr. B.S., 1913, M.L.D., 1914 Cornell University	D. C.	Woodward Building
Smith, Arthur	D. C.	145 Kentucky Ave., S.E.
*Smith, Raymond Chester	D. C.	156 W Street
Talcott, John Jared	D. C.	509 9th Street, S.E.

Name	Legal Residence	Address
Taylor, Walter Madison	Ill.	4003 New Hampshire Ave.
Thompson, Edward Elmer	D. C.	747 Park Road
*Truxes, Arthur Henry	S. D.	Reading Room, Library of Congress
Wang, (Mrs.) Mae	China	1917 G Street
Weeks, Cecil Herbert	D. C.	2114 1st Street
West, John Thomas	D. C.	1744 G Street
Whitcraft, Ellis Ebert	D. C.	229 7th Street, N.E.
Willits, George Hughes	Pa.	108 15th Street, N.E.
Wingate, Florence	D. C.	2641 Garfield Street
*Wood, Donald B. M.E., 1912, Lehigh University	D. C.	3301 Highland Place
*Wood, Robert Harrison	Okla.	1736 G Street

TEACHERS COLLEGE

CANDIDATES FOR THE DEGREE OF BACHELOR OF ARTS AND BACHELOR'S DIPLOMA IN EDUCATION

Name	Credits	Legal Residence	Address
Abbott, Ruth Estelle	26½	D. C.	1308 Spring Road
Aiton, Maude Eleanor	24	D. C.	The Portner
Allen, Cornelia Morgan	27	D. C.	1527 Park Road
†Atkinson, Grace	0	Md.	209 East Capitol Street
Barker, Alma	24	D. C.	302 S Street, N.E.
Barnes, Ruth Ellen	24	D. C.	Benning, D. C.
Bashford, Margaret Josepha	34	Va.	R. F. D., No. 2, Alexandria, Va.
Bast, (Mrs.) Lucy Athelia	0	Mich.	4413 8th Street
Beamer, Sarah Etta	24	D. C.	1354 Monroe Street
Bell, (Mrs.) Lee Campbell	1	D. C.	4 Hesketh Street, Chevy Chase, Md.
Beller, Elizabeth Caroline	41	D. C.	235 1st Street, N.E.
Beller, Sadie White	33	D. C.	235 1st Street, N.E.
Benfer, Rachel Lucile	0	D. C.	3009 17th Street, N.E.
Bontz, Mary Ellen	43	Va.	422 North Alfred Street, Alexandria, Va.
Boteler, May Hovencamp	0	D. C.	1604 Michigan Ave., N.E. Brookland, D.C.
Byrne, Louise	0	Va.	East Falls Church, Va.
Cardwell, Annie Marion	11	Va.	513 2nd Street, N.E.
Clark, Ethel Pixley	24	D. C.	1333 Park Road
Coit, Blanche	0	Wis.	Alabama Apartment, 11th and N Streets

Name	*Credits*	*Legal Residence*	*Address*
Costen, Alta	28	Md.	East Falls Church, Va.
Cuthbertson, Marie Gertrude	0	D. C.	2204 Evarts Street, N. E.
Dakin, Hazel Ellison	24	D. C.	408 7th Street, S.W.
Davison, (Mrs.) Mabel	24	D. C.	318 3rd Street
Denison, Harriet Alberta	29	D. C.	3117 35th Street, Cleveland Park, D. C.
Dent, Mary Catherine	32	D. C.	3009 P Street
Dilger, Mary Anne	0	D. C.	1211 Euclid Street
†Dove, Beulah Augusta	0	Md.	Rockville, Md.
Eldridge, Hattie Dayton	48	N. C.	2017 Park Road
Emory, Mary Annette	30	D. C.	811 6th Street, N.E.
*Endicott, Elizabeth	24	D. C.	1330 R Street
English, Maude Franzoni	38	D. C.	1926 Biltmore Street
Evarts, Frances Louise	21	D. C.	1647 Lamont Street
Ficklin, Kroes	29	Va.	714 Duke Street, Alexandria, Va.
Fuller, Carrie May	0	D. C.	3308 14th Street
Fuller, (Mrs.) Josepha Boyd	24	D. C.	1348 Euclid Street
Galeski, Alexandra Louise	28	D. C.	1769 Columbia Road
Gambs, John Sacké	0	Ohio	2617 University Place
Gardner Susan Helen	24	D. C.	218 Maryland Ave., N.E.
Gibbs, Kate Maria	45	Mass.	3703 14th Street
Glascock, Fannie Ella	0	D. C.	1211 Euclid Street
Gordon, Helen	29	Ill.	1527 Park Road
Greenwood, Katherine Edgar	24	D. C.	806 Maryland Ave., N.E.
Greenwood, Mary Maud	34½	D. C.	806 Maryland Ave., N.E.
Gronna, Amy Beatrice	47	N. Dak.	2219 California Street
Grosvenor, Edith Louise	0	D. C.	The Iowa
Grover, (Mrs.) Mary Hedgcock	41	Ind.	2106 F Street
Guilford, Charles Carlton	24	Va.	R. F. D. No. 1, McLean, Va.
Hanley, Mary Agnes	0	Pa.	1421 Harvard Street
Hardy, Rose Lees	33	D. C.	812 East Capitol Street
Hartmann, Wilhelmine Cornelia	49½	D. C.	1511 16th Street
Helgesen, Gladys Lenore	31	N. Dak.	1921 19th Street
Hellman, Dorothy	46	Wyo.	2804 Cathedral Avenue
Henderson, Eleanora	24	D. C.	1630 17th Street
*Hendry, Alma L.	24	Md.	Bethesda, Md.
Hobgood, Katharine White	33	La.	3631 10th Street
Hughes, Mildred May	46	D. C.	232 6th Street, S.E.
Hummer, Elizabeth Alice	51½	D. C.	812 East Capitol Street
Johnson, Virginia Head	29	D. C.	1423 R Street
Johnston, Grace Virginia	24	D. C.	4 Quincy Place, N.E.

Name	*Credits*	*Legal Residence*	*Address*
Kalb, Dorothy Buhrman	47	D. C.	1535 T Street
*Kause, Selma	29	Ohio	1905 Jackson Place, N.E.
Kayser, Elmer Louis	16	D. C.	3129 O Street
Kelton, Adelaide	24	D. C.	1827 Kalorama Road
Knowles, Margaret Morton	47	D. C.	132 R Street, N.E.
Kothe, Charles	56	N. Y.	807 18th Street
Leyburn, Nellie Cummings	9½	Va.	Ballston, Va.
Lombard, Lou	0	D. C.	1412 Chapin Street
McCaffrey, Lasalia	0	D. C.	28 2nd Street, N.E.
McCarty, Cora	26	D. C.	912 19th Street
McGroarty, Mary Evangeline	24	Va.	Box 138, Falls Church, Va.
†McKnew, Jane Marion	31½	D. C.	1421 Columbia Road
McKnight, Anna Leila	40½	D. C.	2010 F Street
Mason, Josephine Dwight	54½	D. C.	1348 Euclid Street
Matthews, Etta Helene	29	D. C.	1223 Euclid Street
*Mueden, Pauline	23½	D. C.	The Portner
Mulford, (Mrs.) Bessie Boyd	33	D. C.	3014 Dent Place
Murray, Mary Frances	37	D. C.	433 13th Street, S.
Nevins, Ruby	30	D. C.	1421 Columbia Road
Newcombe, Mary Anne	38½	D. C.	144 12th Street, N.E.
Newhouser, Enola Harriet	34	D. C.	217 East Capitol Street
Nichols, Helen Gilman	25	D. C.	2604 University Place
Oberly, Portia Meredith	26	D. C.	2619 Garfield Street
O'Brien, Margaret Rose	24	D. C.	1002 4th Street N.E.
Offutt, Viola	31½	Md.	Bethesda, Md.
Patterson, Ida Belle A.B., 1903, Queen's College	33	Va.	2115 California Avenue
Payne, Lilly May	28	Va.	Ballston, Va.
Pendleton, Agnes Louise	24	D. C.	901 M Street
Phillips, Ruth Sutherland	0	D. C.	87 Eastern Avenue, Takoma Park, D. C.
Prentiss, Margaret Joanna	0	D. C.	1720 Oregon Avenue
Pywell, Laura Virginia	34	D. C.	72 V Street
Reeve, Felicia Ann	48	D. C.	1626 19th Street
Reeve, Laura Washburn	30	D. C.	1626 19th Street
Richards, Ruth	0	Va.	Clifton Station, Va.
Robey, Mabel Alidas	49	D. C.	1813 North Capitol Street
*Robinson, Ednah Florence	32½	D. C.	3917 7th Street
Rose, Mary Estelle	34½	D. C.	2963 Tilden Street
Rowell, Marguerite Northen	24	Va.	West Falls Church, Va.
Ruff, Julia Elizabeth	46½	D. C.	505 A Street, S. E.
Saunders, Marguerite Josphine	0	D. C.	64 Q Street
Selah, Miriam Hughes	26	D. C.	17 3rd Street, N.E.

Name	*Credits*	*Legal Residence*	*Address*
†Seoane, Carita Grace	0	Va.	Merrifield, Va.
†Sheads, Mary E.	24	D. C.	The Balfour Apartments
Sornborger, Dorothy Gertrude	0 16½	D. C.	908 Sheridan Street
Speiser, Mary Elizabeth	0	D. C.	226 8th Street, S.E.
Sprague, (Mrs.) Rena Owens	32	N. Y.	3616 Newark Street
Stallings, Mildred Evelyn	30	D. C.	1200 East Capitol Street
Steger, Mary Evelyn	17	D. C.	1906 Florida Avenue
Steuart, Emily Nourse	24	D. C.	3058 R Street
Stewart, Elizabeth Tabb	33	Va.	East Falls Church, Va.
Stewart, Lettie Ethel	11	D. C.	2411 1st Street
Stewart, Mary	0	D. C.	627 Maryland Ave., N.E.
Stone, Charles Leonard S.B., 1909, Valparaiso University	54	D. C.	711 Cedar Street, Takoma Park, D. C.
Summy, Ethel	48½	D. C.	1623 R Street
Terry, Raymond Everett	35	N. Y.	1830 H Street
Thompson, Charles Newton	42	D. C.	811 I Street
†Thompson, Edith	2	Va.	Falls Church, Va.
Thompson, Frank Elsie	0	Ohio	516 2nd Street
Thönssen, Ruby Ella	33	D. C.	315 C Street, S.E.
*Tiffany, Emma Ruth	52½	D. C.	3409 Brown Street
*Trainor, Ernestine	17	Md.	Woodside, Md.
Underwood, Mary Louise	57	D. C.	115 12th Street, S.E.
Van Doren, Emma May	53½	D. C.	629 Massachusetts Avenue N. E.
Votaw, Heber Herbert	0	Ohio	In care of College, Takoma Park, D. C.
Walter, Gertrude Elizabeth	0	D. C.	623 East Capitol Street
Wanstall, Grace	30½	D. C.	1706 F Street
Whitford, Bessie	45	D. C.	3369 18th Street
Willits, Margaret Sharpless	54	D. C.	122 Baltimore Avenue, Takoma Park, D. C.
Wiltberger, Eugenia Barnes	0	D. C.	601 Taylor Street
*Wimer, Martha Elizabeth	31½	D. C.	The Imperial
Wolf, Hattie Mary	0	D. C.	626 22nd Street
Wood, Mary Louise	24	D. C.	233 8th Street, N. E.
*Woodward, Esther Rittenhouse	41	D. C.	125 New York Avenue
Yoder, Bertha Alice	34½	D. C.	1225 Euclid Street
Zeiders, Katherine Minsker	43½	Pa.	1221 K Street

SPECIAL

Name	*Legal Residence*	*Address*
*Brown, Mary A.B., 1915, George Washington University	D. C.	2464 Ontario Road
Browne, Gertrude Veronica A.B., 1914, George Washington University	D. C.	1344 Girard Street
Elmore, (Mrs.) Mary DeFord	D. C.	3102 Mt. Pleasant Street
†Fleming, (Mrs.) Ella Daly	D. C.	912 Massachusetts Avenue
Gilliss, Helen A.B., 1912, George Washington University	D. C.	The Kensaw
*Haslup, Alice Elma A.B., 1912, George Washington University	D. C.	2114 18th Street
Lawson, Margaret Lucile	D. C.	206 13th Street, N.E.
A.B., 1914, George Washington University	D. C.	206 13th Street, N.E.
*Lee, (Mrs.) Charlotte White	D. C.	1741 Lanier Place
Oberly, Ruth Mildred	D. C.	2619 Garfield Street
*Rawlings, Kate Elizabeth	D. C.	3827 14th Street
*Scott, Leila Fordham A.B., 1913, George Washington University	D. C.	649 B Street, N.E.
Searle, Juliet MacCall	D. C.	1131 12th Street
Simon, (Mrs.) Theresa M.	D. C.	1634 Riggs Place
*Tyndall, Mary Siphora A.B., 1915, George Washington University	D. C.	215 East Capitol Street
Walker, Emma Eaton	Md.	R. F. D. No. 3, Station H
†Whiteley, (Mrs.) Mary Norsworthy	Md.	1306 18th Street
Wright, Grace Viola	D. C.	The Montgomery
Zinssmeister, Grace Mary	D. C.	1364 Girard Street

SUMMARY

Graduate Students

Students in attendance	3	
Candidates for D.C.L. degree	1	
Candidates for C.E. degree	3	
Candidates for E.E. degree	2	
Candidates for M.E. degree	5	
Candidates for S.M. degree	24	
Candidates for A.M. degree	43	
Candidates for Ph.D. degree	34	
	115	
Duplicates	1	
		114

Undergraduate Students

Columbian College

Candidates for A.B. degree	288	
Candidates for B.S. in Chemistry degree	88	
Candidates for B.S. in Medicine degree	12	
Pre-Medical	25	
Special	286	
		699

College of Engineering

Candidates for B.S. in Arch. degree	20	
Candidates for B.S. in C.E. degree	54	
Candidates for B.S. in E.E. degree	26	
Candidates for B.S. in M.E. degree	36	
Special	95	
		231

Teachers College

Candidates for A.B. and Teacher's Diploma	134	
Special	18	
		152
		1196
Duplicates		2
		1194

MEDICAL SCHOOL

CANDIDATES FOR THE DEGREE OF DOCTOR OF MEDICINE

First Year

Name	*Legal Residence*	*Address*
Barone, Charles James	N. Y.	1411 E Street, N.W.
Bassett, George Overton	D. C.	604 7th Street, N.E.
Berman, Morris	Minn.	1726 P Street
Bernstein, Samuel	Va.	1726 P Street
Brown, Julian Belknap	Fla.	1445 Massachusetts Ave.
*Butler, George Norwood	D. C.	1867 Monroe Street
Campbell, Elliott Muse, Jr.	D. C.	1757 Columbia Road
Carr, Elma Bebee	Ky.	906 P Street
Crisp, Thomas Benton, Jr., Phar.D., 1915, George Washington University	D. C.	638 E Street, N. E.
Decker, Raymond Vincent	D. C.	915 Florida Avenue
Doctor, Ratansha Merwanji	India	1208 K Street
Doyle, John Conan	N. H.	2122 P Street
*Fisher, Bertha Gae	Ill.	1433 Rhode Island Avenue
Gardner, William Clifford	Pa.	Cecil Apartment
*Harmon, Frank Henry	Texas	Tuxedo, Md.
Hottel, Robert Roy	Md.	2122 P Street
*Jensen, Emma Amelia Ph. G., 1905, Valparaiso University	Ind.	1325 H Street
King, William Binford	Tenn.	1900 S Street
Kreiselman, Joseph	Ohio	1726 P Street
LaFond, Dolor Joseph Arthur	Mass.	1316 I Street
*Lockwood, James Booth	Va.	411 10th Street
*Marino, Charles Arthur	N. Y.	1217 E Street
*Masone, Joseph	Italy	815 East Capitol Street
Moxon, Gail Fitch	D. C.	1225 L Street
Munoz, Roque Norciso Alfonzo	C. A.	909 I Street
*Ocson, Jose M.	P. I.	1325 H Street
Shapiro, Hyman David	D. C.	95 L Street
Smart, James Alexander	Va.	Herndon, Va.
Smiler, Nathan Norman	D. C.	1001 U Street
*Timberman, John Elmer Winfield	Va.	Alexander, Va.
Tribble, Samuel Lamar	Ga.	The Burlington
Zerbe, John Bertolette	Pa.	Afton Apartment

Second Year

Name	*Legal Residence*	*Address*
Bittinger, Samuel Moffett	Tenn.	3910 Livingston Street
Cajigas, Tomas Moreu	P. R.	Chevy Chase, Md.
Connor, Jack Anthony	D. C.	2227 First Street
Davis, Cecil Clair	N. Mex.	926 L Street
*Davis, Margaret Quinlan	D. C.	926 L Street
Hartley, Gilbert Vernon	D. C.	611 E Street, S.E.
Leetch, Henry Winship	D. C.	3259 R Street
Lewis, Edward	Tenn.	1726 P Street
Lyons, John Hugh	D. C.	2331 First Street
McDowell, John Stafford	N. Y.	1324 L Street
†Manus, Harry Martin	N. Y.	George Washington University Hospital
Mason, Lyle Millan	Va.	308 B Street, N.E.
Moxon, Frank Macquarie, A.B., 1915, Maryville College, Sc.B., 1915, Valparaiso University	Ohio	1225 L Street
Oden, Axel Robert	Sweden	1730 M Street
Pendexter, Ralph Stevens LL.B., 1913, Georgetown University	Conn.	2146 Pennsylvania Avenue
Rawson, George Henry	Mass.	821 M Street
Ruiz, Ramon Clodomiro Nazario Phar.D., 1914, Porto Rico Board of Pharmacy	P. R.	905 13th Street
Schoenfeld, Herbert Herman	D. C.	3448 34th Place, Cleveland Park
Snider, Ivan	Okla.	Y. M. C. A.
Tanner, Monroe Julius	Conn.	1322 Vermont Avenue

Third Year

Bolton, Boyce Richardson	D. C.	Episcopal Ear, Eye and Throat Hospital
Brian, Victor McMurry	Ill.	1017 12th Street
Camp, Joseph Warren	Ore.	1252 6th Street, S.W.
Collins, George Aloysius	Pa.	1333 15th Street
Coombs, Forrest Pembrock	W. Va.	1010 10th Street
Cortes, Manuel, Jr.	P. R.	The Melrose
Davis, Ralph Harold	N. Y.	1333 H Street
Dickerson, Dorrell Ghio	N. C.	The New Berne
Dowling, George Brackett	D. C.	3603 14th Street
Eisenberg, Philip Noah	Wis.	1318 L Street
Elmore, Henry Gibson	D. C.	1727 Riggs Street

Name	*Legal Residence*	*Address*
Fadeley, James McNelledge	Va.	1326 L Street
Frischkorn, Charles Rock	Pa.	1242 Newton Street, N.E.
Gill, William Tignor, Jr.	D. C.	442 M Street
Groesbeck, Bertram, Jr.	N. Y.	1824 S Street
Hadley, Henry Gilbert	N. Y.	Starmont Sanitarium, Washington Grove, Md.
Haupt, William Herbert	S. A.	605 O Street
Hecht, David	N. Y.	1214 I Street
Herschman, Myer Jerome	D. C.	2733 P Street
Hines, Clifford Gentner	D. C.	1512 Columbia Road
Houghton, James Edwin	D. C.	1102 14th Street
Kennedy, Glen Marion	Cal.	1308 I Street
Kotz, Jacob	D. C.	1005 6th Street, N.E.
Leu, Raymond Hansford	W. Va.	1308 I Street
Mann, Jesse Thomas	D. C.	1011 B Street, N.E.
Manning, Wilbur Oscar	D. C.	22 Second Street, N.E.
Miller, Robert Bartle	D. C.	1320 10th Street
Miller, William Campbell	D. C.	115 Carroll Avenue, Takoma Park, D. C.
Montgomery, Howard Howlett	Md.	Silver Spring, Md.
Mueller, Louis Eugene	Wis.	1208 M Street
Mulligan, Edward William	R. I.	1326 L Street
Oborski, Zygmond Anthony	Pa.	1305 H Street
Otis, Fessendon Newport	Conn.	1322 Vermont Avenue
Otis, Israel Sabine	Conn.	1322 Vermont Avenue
Peters, David B. Phar.D., 1910, George Washington University	Va.	Columbia Hospital
Ritzhaupt, Louis Henry A.B., 1912, College of Medical Evangelists, Loma Linda, Cal.	Okla.	926 L Street
Rivera, Pedro Aponte	P. R.	1302 L Street
Satterlee, Richard Covert	Ill.	1208 M Street
Shinn, Herbert Linville	D. C.	145 11th Street, N.E.
Speidel, Francis George	D. C.	2309 First Street
Staknevich, John Henry	N. J.	1324 L Street
Storch, Raymond Bernard	D. C.	1361 Spring Road
Sullivan, Earle Eugene	N. Y.	1333 H Street
*Swift, Charles Leslie	Cal.	1325 H Street
Venzke, Harry Ernest	Canada	1318 L Street
Villamil, Jose Rosado	P. R.	24 Grant Place
Wambsganss, Lina	Germany	730 21st Street
Weaver, Clarence Easterly	D. C.	132 Kentucky Avenue, S.E.

Fourth Year

Name	*Legal Residence*	*Address*
Andrews, John Nevins	D. C.	1252 Sixth Street, S.W.
Bergeron, George Gernon	R. I.	1305 Rhode Island Avenue
Brin, Carlos Nicholas	Panama	1402 L Street
Catzva, Morris	Russia	235 F Street, N.E.
Chadwick, Everell Verni	Pa.	321 East Capitol Street
Chamberlin, Frank Tenny, Jr.	D. C.	1323 M Street
Collins, Robert Hugh	Va.	Fort Myer Heights, Va.
Conaway, Austin Ottis	W. Va.	37 V Street, N.E.
Coolidge, Leroy Elmer	Pa.	1333 H Street
Cousins, Sidney Charles	D. C.	Homeopathic Hospital
Cushing, Eleanore Scholl	Ill.	1019 C Street, S.W.
Figueras, Jaime Julian	P. R.	24 Grant Place
Folsom, John Eugene	D. C.	933 H Street
†Gordon, Robert John	Wis.	2115 Pennsylvania Ave.
Grayson, Stewart Maxwell	Va.	1741 Lanier Place
Haskell, Roy Terry	D. C.	808 New Jersey Avenue
Huddleston, Jarrett Matthew	D. C.	2504 Hall Place
Hunter, Edward Raymond M.D., 1914, Hahnemann Medical College	N. J.	1333 H Street
Jacobs, Burton Leroy A.B., 1913, Union College, Nebraska, A.M., 1914, University of Nebraska	Tenn.	1208 M Street
Ladd, John Morriss	Va.	Washington Asylum Hospital
McCanna, Louis Eugene	N. Y.	937 K Street
Macon, Edward Bailey Phar.G., 1912, State College Angola Ind.	D. C.	1305 Thode Island Avenue
Norton, William Harrison Phar.D., 1912, George Washington University	N. Y.	Sibley Hospital
Powers, Richard Thomas	N. Y.	1131 8th Street
Quirk, Jerome Thurston	Va.	Garfield Hospital
Ramsay, James Archie	Canada	1208 M Street
Reuter, Fritz August	D. C.	1337 Park Road
Rice, Eugene Clarence	D. C.	Garfield Hospital
Rivera, Rafael Aulet	P. R.	24 Grant Place
Rosenberg, Louis Charles	Conn.	937 Massachusetts Avenue
Ryan, Frank Kevan	N. Y.	1342 Vermont Avenue
*Shea, George Marvin Waite	Conn.	3210 19th Street
Shilen, Joseph	N. Y.	803 12th Street

Name	*Legal Residence*	*Address*
Stachniewicz, Vincent Joseph	D. C.	1765 Euclid Street
Stratton, Ernest Kenneth P.D., 1910, Philadelphia College of Pharmacy	N. J.	Central Dispensary and Emergency Hospital
Taylor, Sterling Price, Jr.	D. C.	1240 Pennsylvania Avenue, S.E.
Thyson, Leo Cromwell Phar.D., 1912, George Washington University	D. C.	1366 Columbia Road
Tilton, Joel Adams, Jr.	D. C.	1520 29th Street
Walton, Robert Ralph	Wash.	1342 Vermont Avenue
White, Paul Amos S.B., 1908, Simpson College; Ph.B. 1908, University of Chicago	D. C.	37 V Street, N.E.
Williams, V. Blackstone	D. C.	Children's Hospital
Burrus, Mallory Vincent M.D., 1903, Grant University	D. C.	1537 I Street

SPECIAL STUDENTS

Hirsch, Henry Albert	D. C.	1028 7th Street
Ketcham, Anna Marie A.B., 1904, Smith College; D.O., 1907, Philadelphia College of Osteopathy	D. C.	1806 H Street
Li, Kang	China	2014 Kalorama Road
Reiss, George Samuel M.D., 1914, Georgetown University	N. Y.	Washington Asylum Hospital
Vestal, Paul William Phar.D., 1915, George Washington University	D. C.	1102 13th Street
West, (Mrs.) Max	D. C.	1839 Summit Place
White, Gershom Franklin M.D., 1909, George Washington University	N. Y.	1332 Vermont Avenue

SUMMARY

First year	32
Second year	20
Third year	48
Fourth year	41
Special	8
	149

DENTAL SCHOOL

CANDIDATES FOR THE DEGREE OF DOCTOR OF DENTAL SURGERY

First Year

Name	*Legal Residence*	*Address*
Agnew, Gordon Granger	D. C.	2005 G Street
*Birmingham, Charles Henry	Pa.	1404 15th Street
*Blum, Henry	N. Y.	1135 6th Street
Boiko, Joseph Alexander	N. Y.	1111 13th Street
Bonnett, Ralph William Smead	Ohio	736 Park Road
Boston, John Armistead	Va.	Hamilton Hotel
Brown, Roger Allen	D. C.	1700 15th Street
*Brustein, Joseph	Pa.	101 Capitol Street, N.E.
Cheely, Walter Cuthbert	Colo.	1741 G Street
Collins, John Patrick	D. C.	507 N Street
Copping, John Blake	D. C.	R. F. D. No. 1, Station H
Cowley, William Hyde	Utah	1215 10th Street
*Dailey, Frank Leonard	D. C.	1430 Newton Street
Danforth, Earl Fielding	D. C.	2109 18th Street
*Davila, Luis L.	P. R.	1325 H Street
Edwards, John William	Vt.	1700 15th Street
Erickson, Hilmer Alvin	Minn.	935 New York Avenue
Faherty, Leo Charles	D. C.	1400 Pennsylvania Ave., S.E.
Fainman, Abraham	Russia	2137 9th Street
Frank, Earl Bennett	R. I.	1224 Massachusetts Ave.
*Freeman, Maurice Preston	D. C.	3315 O Street
Goren, David	Mass.	1135 6th Street
*Germain, Leo Aloysius	N. Y.	1325 H Street
*Griffin, Francis Summers	Mass.	1112 New York Avenue
Harbison, Leo Anthony	D. C.	1407 Chapin Street
Harrington, George Elliott	D. C.	4641 Conduit Road
Harris, Michael	England	1135 6th Street
Heath, James Pierre	N. Y.	Y. M. C. A.
Hein, Edward	Ill.	25 Mt. Vernon Apts.
*Jaffin, John Jay	N. Y.	1325 H Street
*Kathen, William	Ill.	4123 9th Street
Keroes, William	D. C.	2404 14th Street
King, Willard Jours	D. C.	504 3rd Street
Kuku, Jacob Lewis	N. Y.	630 Elliott Street, N.E.
Levey, Nathan	N. Y.	1109 14th Street
Longcor, Charles Clifford	N. Y.	828 12th Street

Name	*Legal Residence*	*Address*
Lowry, Henry Clay	Mich.	1333 15th Street
*Linsenberg, Nathan Lester	N. Y.	1135 6th Street
McCarthy, Dean Joseph	D. C.	1220 G Street
*Maxwell, Joseph Ramsay	Ala.	2311 18th Street
*Miklos, John Edward	D. C.	1325 H Street
Millekofsky, Meyer	N. J.	704 M Street
*Myers, Robert Lindsey	Va.	101½ North Pitt Street, Alexandria, Va.
*Newbold, Thomas P.	D. C.	608 Tuney Street
*Norman, Joseph	R. I.	1135 6th Street
Owen, George Thomas	Tenn.	664 E Street, N.E.
Popkin, Hymen	N. J.	1726 P Street
*Real, Robert H.	Md.	1914 H Street
Richman, Ivan H.	Minn.	935 New York Avenue
*Rule, Sarah C.	D. C.	1813 Adams Mill Road
Rush, Arma Exner	N. C.	629 G Street
*Russell, Mathew	N. Y.	1214 Kenyon Street
Rustia, Francisco	P. I.	803 8th Street
Sechrist, Noah Cleveland	Pa.	1772 Willard Street
Sherrill, Felix Guy	N. C.	1824 H Street
Shields, Clarence Samuel	Ky.	The Desota Apartment
*Silk, A. Lewis	N. J.	1325 H Street
*Snapp, J. Harper	D. C.	419 M Street
*Torre, Alfonso Dela	Panama	1325 H Street
Trogner, Roland Safford	D. C.	46 Q Street, N.E.
Vickery, Arthur Lewis	N. Y.	828 12th Street
Vordermark, Herman Henry	S. D.	Apartment 403, Woodworth Apartment
Walter, Eugene Leroy	D. C.	1910 First Street

Second Year

Allen, Clarence Basom	Pa.	The Iowa
Arbeely Joseph Evans	D. C.	1723 U Street
Bowen Lawver Winter	Colo.	1700 15th Street
Butkiewicz, Eugenia	D. C.	312 G Street, N.E.
Cannon, Munn Quayle	Utah	1215 10th Street
Claytor, Spry Owen	Ohio	1504 Columbia Road
Copping, Edward John	D. C.	R. F. D. No. 1, Station H
Donahey, Merle Emmanuel	Pa.	1300 Massachusetts Ave.
Douglas, Frank W.	Fla.	1310 Massachusetts Ave.
Elliott, John LeRoy	Md.	712 E Street, N.E.
Flanagan, George Andrew	N. Y.	1103 Vermont Avenue
Forman, Milton	Wis.	Home Apartments
Frost, Leon	Ohio	1333 15th Street

Name	*Legal Residence*	*Address*
Gallagher, Patrick	N. Y.	309 B Street, S.E.
Gillian, Paul Sherwood A.B., 1909 William and Mary College	Va.	1300 Massachusetts Ave.
Goetzman, George Francis	Wis.	211 Florida Avenue
Horgan, Frederick	D. C.	1217 I Street
Kearney, Edward Joseph	D. C.	133 Quincy Place, N.E.
Lady, George Webster	Ohio	518 B Street, N.E.
Lockwood, Daniel Sumner	Ill.	Army Medical Museum
Manley, Oscar Leonard	Mo.	The Coywood
Minkin, Leah	Russia	416 P Street
Ogus, William Irving	Mass.	914 R Street
Porter, Frank Gamewell	Iowa	620 Maryland Ave., N.E.
Postlewait, Claude M.	Ill.	1126 8th Street
Root, James Isaac	Mich.	216 Maryland Ave., N.E.
Stephens, Milton	Tenn.	24 Grant Place
Sullivan, Walter Francis	Pa.	2028 F Street
Woods, Frederick Davis	Ark.	1100 Vermont Avenue
Wyman, Webb Watson	Ohio	1126 8th Street
Yoakum, Festy	W. Va.	1300 Massachusetts Ave.
	Third Year	
Aspinall, Charles Pindall	W. Va.	1418 Meridian Street
Boriosovski, Gershko D.D.S., 1913 University of Kieff, Russia	Russia	1239 4½ Street, S.W.
Burgess, Eric Hjalmar	R. I.	828 12th Street
Butkiewicz, John Constantini	Ill.	312 G Street, N.E.
Cohen, Irwin Bertram	Ala.	1812 9th Street
Cohen, Maurice Harvey	Ala.	1812 9th Street
Cole, John Burns	Mo.	1615 Swann Street
Davis, Albert Wendell	D. C.	160 Tennessee Ave., N.E.
Davis, Bernard Martina	Md.	3019 O Street
*Diehl, Harry Oliver	Pa.	48 H Street, N.E.
Forbes, William E.	N. Y.	Kensington, Md.
Frazier, George Mortimer	D. C.	Congress Heights, D. C.
Herring, Paul Supplee	Md.	1300 Pennsylvania Avenue
Johnson, Walter Norris	Tenn.	The California
Johnston, Patterson Bayne	Va.	941 M Street
Johnston Paul Edward	Va.	9th and G Streets
Lynch Joseph Aloysius	N. Y.	828 12th Street
McCullough, Robert Campbell	Ill.	The Melrose
Moore, Clarence Robert	Va.	1418 Meridian Street
Morgan, John Edward	D. C.	1334 G Street, S.E.

Name	*Legal Residence*	*Address*
O'Brien, William Joseph	Conn.	1104 12th Street
Okada, Mitsuru	Japan	3134 19th Street
Shadrick, John Hebb	Md.	1006 Massachusetts Ave.
Stein, Edwin Leroy	Wash.	24 Grant Place
*Stutzman, William Ernest	D. C.	3533 Warder Street
Sweet, William Manley	D. C.	211 Florida Avenue
Thompson, James Gray	D. C.	1207 East Capitol Street
Willard, Albert William	Maine	706 20th Street
Wilson, Myron Webster	D. C.	1410 Belmont Street
Wolf, May	D. C.	626 22nd Street
Special		
Brashears, William Nathaniel	N. Mex.	2112 F Street
Yero, José	Cuba	1770 V Street

SUMMARY

First year	63
Second year	31
Third year	30
Special	2
	126

LAW SCHOOL

Names of students who have withdrawn or graduated are indicated by stars; those who have entered since February 1, 1916, by daggers.

Students who are college graduates are indicated by the degree, year in which it was received and name of the college conferring it.

Students who have had only part of a college course in addition to the necessary preparatory education are indicated by the names of the colleges attended.

CANDIDATES FOR DEGREE OF BACHELOR OF LAWS

First Year Class

Name	*Legal Residence*	*Address*
Alverson, Lyle Thomas	Ill.	War Department
*Ames, Henry Peck B.S., in Agriculture, 1913, Maryland Agricultural College	Va.	George Washington Hotel
Birmingham, John Thomas	Conn.	1416 Rhode Island Avenue
Bland, William Thomas George Washington University	Mo.	The Brighton
†Borba, John	Brazil	Hyattsville, Md.
Boucher, Hiram A. University of Minnesota	S. D.	3351 18th Street
Brody, Arthur Chester	N. Y.	The Brunswick
Buchanan, Andrew Frederick, Jr. Agricultural and Mechanical College of Texas	Texas	1107 13th Street
Bullough, John, Jr	D. C.	122 Tennessee Ave., N.E.
Burg, Robert Edward George Washington University	D. C.	2034 F Street
*Burton, George John	N. Y.	420 Randolph Street
Callahan, Charles D	D. C.	714 18th Street
Carbo, Ernest Philip	D. C.	1614 I Street
Carter, Ferdinand Espey	Md.	Taylor Street, Chevy Chase, Md.
Carter, John Galen A.B., 1914, A.M., 1915, Georgetown University	Mont.	1528 16th Street

Name	*Legal Residence*	*Address*
Cathcart, Robert Malcolm	Va.	Ballston, Va.
Cheatham, Ida May Blount Barnard College, George Washington University	Ga.	1757 K Street
Clark, Frank Rinker B.S., 1910, University of Utah	Utah	1346 Parkwood Place
Connell, Letcher Benjamin	Tenn.	House Office Building
Crabbe, Albert William University of Utah	Utah	209 Senate Office Building
Cunningham, Julian Wallace George Washington University	D. C.	1636 Monroe Street
†Davidson, Delozier M.E., 1915, Lehigh University	N. J.	The Cumberland
*Davidson, Joseph Moore University of Michigan Hillsdale College	La.	1810 N Street
Denit, Louis Malvern	D. C.	1239 I Street, N.E.
De Prez, Ralph Ruess	D. C.	4027 Connecticut Avenue
Dieserud, Einar Wellen	D. C.	216 Maryland Ave., N.E.
*Douglas, James Franklin, Jr.	D. C.	516 East Capitol Street
Dowell, Benjamin Butterworth	D. C.	3162 Mt. Pleasant Street
Dowell, Cassius McClellan	Ill.	1738 Lanier Place
Duvall, Walker Mareen George Washington University	D. C.	1831 M Street
*Echols, Oliver Patton University of Virginia	Va.	1712 17th Street
†Eddy, Lewis Edwin B.S., 1887, M.S. 1891, Campbell College, Holton, Kans.	Md.	General Land Office
Ely, Walter Morley	Mich.	2011 Columbia Road
Esch, George Edwin University of Wisconsin	Wis.	116 Todd Place, N.E.
Estes, Andrew Broaddus, Jr. University of Georgia	Ga.	119 2nd Street, N.E.
Fjeld, Alvin L St. Olaf College, Northfield, Minn., George Washing-University	S. D.	1412 Massachusetts Ave.
Freeman, Hadley F. B.S. in E.E., 1914, Case School of Applied Sciences	Ohio	U. S. Patent Office

Name	*Legal Residence*	*Address*
Freeman, Maurice Preston	D. C.	3315 O Street
Fuller, C. T. Burton A.B., 1915, Central University of Iowa	Iowa	Department of Justice
Furlow, Allen John	Minn.	1319 Massachusetts Ave
*Gilbert, Harry Chapman	D. C.	District National Bank
Glaze, L. Willard North Western University	Ill.	1810 N Street
Graves, John Temple Jr., Litt.B., 1915, Princeton University	D. C.	1754 Q Street
Gudger, Emmet Carlyle A.B., 1901, University of North Carolina	N. C.	U. S. S. Mayflower
Guy, Ernest Carlyn Lafayette College	D. C.	308 5th Street, S.E.
Hall, Gibert Lewis A.B., 1899, Swarthmore College	Ore.	Indian Office
Hall, Joseph Farland A.B., 1912, William and Mary College	Va.	Episcopal High School, Alexandria, Va.
Hanes, Harold Fitz-Hugh	Va.	Herndon, Va.
Harden, Fred Geer A.B., 1907, A.M., 1908, University of Nebraska	Neb.	1468 Harvard Street
†Heckmann, William Jacob	Iowa	212 12th Street, S.W.
Helman, John P. George Washington University	Kans.	2002 G Street
†Hemphill, John Princeton University	D. C.	2108 Bancroft Place
†Hensel, Frederick William	Minn.	9 9th Street, S.E.
Herrmann, William Frederick August	D. C.	742 10th Street, S.E.
Hill, Walter Barnard B.S. in E.E., 1913, University of Georgia	Ga.	1120 Rhode Island Avenue
Hinton, Raymond James George Washington University	N. Y.	1700 15th Street
*Holden, Charles Franklin	D. C.	307 McLachlen Bank Building
Hubert, Wilmer Wallace	N. Y.	2022 F Street
Hunt, Ralph Waldo	Texas	2618 Garfield Street

Name	*Legal Residence*	*Address*
†Jackson, Howell Edmunds Vanderbilt University	Ga.	Y. M. C. A.
Jacobson, Charles Wells A.B., 1915, University of Georgia	Ga.	1101 13th Streets
Jeffries, John Miller George Washington University	D. C.	1800 New Hampshire Ave.
Johns, Hyland Righter B.S. in E.E., 1913, University of Pennsylvania	Pa.	1450 Harvard Street
Johnson, William Monroe	Md.	The Marlborough
*Keenan, Mabel George Washington University	Md.	Brentwood, Md.
Kelly, William Michael George Washington University	Col.	1836 Lamont Street
Kidder, Harry Waldo A.B., 1911, Colby College	Me.	1865 Kalorama Road
Kilmartin, Robert Charles	D. C.	3319 R. Street
Kissinger, Merle Clyde	Pa.	617 K Street, N.W.
Knaack, Walter Reubens	Wash.	War Department
*Krantz, Walter Donald	D. C.	1926 Calvert Street
*Kubel, Herbert Graham	D. C.	1000 East Capitol Street
Kumler, Kelvin Chase	Md.	Kensington, Md.
*Lamson, Fanny Parnell	Md.	1306 O Street
†Lavery, Thomas Claffey Valparaiso University	Mo.	712 20th Street
Lawrence, Clyde Shelley B.S., 1915, Military College of South Carolina	S. C.	221 East Capitol Street
Leavell, Benjamin Ashby	Md.	American Security & Trust Co.
Lehr, Milton Anthony George Washington University	Ohio	Library of Congress
Leonard, J. Cecil University of Michigan	Mont.	1101 13th Street
*Leonard, Merle Clifford	Mass.	1401 Columbia Road
Lorenz, David	D. C.	3604 14th Street
Lupton, Thomas Allen William and Mary College	Va.	1700 15th Street
McIntyre, Leslie Playford West Virginia University	W. Va.	1922 6th Street
McKnew, Donald Harrison George Washington University	D. C.	1906 23d Street

Name	*Legal Residence*	*Address*
McReynolds, Louis Raymond	Okla.	922 L Street
Manning, Thomas Ralph George Washington University	Pa.	22 2d Street, N.E.
Marks, Frank Henry	D. C.	1002 Fairmont Street
†Maxson, Donald Livingstone	Md.	Victor Building
*Merryman, Leo Arthur George Washington University	Mo.	1700 15th Street
Michael, John William, Jr. George Washington University	N. Y.	18 New York Ave., N.E.
Miller, Clarence Altha	Pa.	642 Orleans Place, N.E.
*Mott, Ruth Woolsey Johnson Vassar College	N. Y.	1627 16th Street
Munroe, Joseph Martin Catholic University of America	N. C.	1242 Maryland Ave., N.E.
†Murphy, Robert Daniel Marquette University	Wis.	Post Office Department
Newcomb, Irving Beekman Georgetown College	Md.	3406 17th Street
Oswald, James Leslie Graduate 1908, from U. S. Naval Academy	Ind.	Army and Navy Club
Parmelee, William Horace	Pa.	2011 Columbia Road
Pattrick, John Hezzie A.B. and B.S. in Ed., 1912, University of Missouri	Mo.	1736 G Street
Peterson, Alvin Ray University of Illinois	Ill.	Federal Trade Commission
†Peterson, Robert Karl	D. C.	The Lenox
Porter, Herbert Henderson Massachusetts Institute of Technology	Pa.	Clarendon, Va.
Rhoade, Max	Va.	412 K Street
Richardson, Harold Evan	D. C.	933 N Street
Richardson, Henry Jefferson Ouachita College	Ark.	1810 N Street
Richey, Daniel L.	Kans.	3634 10th Street
Robison, Bruce Pettibone A.B., 1915, Butler College	Ind.	340 House Office Building
Robson, Lloyd Anthony	R. I.	1224 Massachusets Ave.
*Rohlck, Bernhard F. E.	Iowa	1917 G Street
Rust, Harry Lee, Jr., Lehigh University	D. C.	1400 H Street

Name	*Legal Residence*	*Address*
Sanborn, Edgar Cummings A.B., 1915, Dartmouth College	N. H.	1823 G Street
Schaffer, John Leinbach Graduate, 1908, from U. S. Naval Academy	D. C.	Army and Navy Club
*Seiglie, Oscar Doctor of Civil Law, 1911, University of Havana	Cuba	The Roydon
Shea, James Patrick A.B., 1915, Georgetown College	D. C.	1161 Neale Street, N.E.
Shepard, Donald D'Arcy	D. C.	429 Massachusetts Ave.
Shrewsbury, Frank William	W. Va.	541 21st Street
Smith H. Alma University of Utah	Utah	1220 11th Street N.W.
*Smith Joseph Charles	Pa.	509 Willard Courts
*Smith Talma L. George Washington University	Texas	5216 Illinois Avenue
†Smith William Andrew, Jr.	D. C.	3817 Jocelyn Street
Smoot John Harry	D. C.	1433 Foxall Road
*Sowders Harold George	Ohio	1788 Columbia Road
Stecher Karl Fairmount College Wichita Kans.	Kans.	Y. M. C. A.
Stevens W. R. Barksdale B.S. 1914, University of Mississippi	Miss.	1810 N Street
†Stewart, Bernie Ray	N. C.	933 23d Street
†Stewart, Charles Harrington	D. C.	1922 H Street
Stone, Clifford Fontaine	Wis.	1828 G Street
Stukes, Taylor Hudnall A.B., 1915, Washington & Lee University	S. C.	335 House Office Building
Stuwe, J. Daniel B.S. in E.E., 1912, George Washington University	Minn.	3913 Kansas Avenue
Taylor, Edward Curtis S.B., 1914, Massachusetts Institute of Technology	Mass.	2323 Ashmead Place
Taylor, William Reginald Purvis	Va.	406 5th Street
Thorne, Harold Carrier George Washington University	Md.	Patent Office

Name	*Legal Residence*	*Address*
Timms, Minnie E. George Washington University	D. C.	1426 K Street
†Tripp, Ralph Wright	Mass.	2329 N Street
Valentine, Edward Lycurgus	Ark.	626 F Street, N.E.
*Van der Veer, Norman Reeve Graduate, 1908, U.S. Naval Academy; Princeton University	D. C.	Navy Department
*Walters, Edward Henry	Cal.	213 9th Street, S.W.
Waters, Daniel James	D. C.	1858 Columbia Road
Weikert, Gerald Vernell	D. C.	The Woodworth
†Wheeler, Walter Calhoun B.Chem. E., 1912, University of Michigan	N. Y.	1316 L Street
*White, John Ellington, Jr. Wake Forest College	Ga.	2011 Columbia Road
Willes, Hoadley Horatio	Conn.	1208 K Street
Willey, Earle Dukes Ph.B., 1911, A.M., 1915, Dickinson College	Del.	2219 1st Street
Williams, Leslie Sanborn A.B., 1915, Washington and Jefferson College	Minn.	1319 Massachusetts Ave.
Wilson, Steven Bayard University of Michigan	Mass.	2303 11th Street
Wood, Richard Francis C.E., 1915, Lehigh University	D. C.	92 Fendall Building

Second Year Class

Albrecht, George Moritz E.E., 1906, University of Minnesota	Minn.	U. S. Patent Office
Alexander, Walter Richardson University of Missouri	Mo.	1110 Rhode Island Avenue
Ash, Robert	N. Y.	Wardman Court
Bacon, George Hearne A.B., 1910, Delaware College	Del.	1332 I Street
Baldwin, Philip Lesuer Beloit College	D. C.	135 A Street, N.E.
Banks, Andrew Jackson	Ohio	712 I Street, N.E.
Baskin, Maurice A.B., 1911, Harvard University	D. C.	1807 California Street

Name	*Legal Residence*	*Address*
Billingsley, James Lemuel	Okla.	Y. M. C. A.
Borden, Frank H. University of Pennsylvania	Pa.	Barrister Building
Bostroem, August B.S., 1903, College of the City of New York; M.E., 1906, Cornell University	N. Y.	1211 Clifton Street
Boteler, William Shock	D. C.	1633 Hobart Street
Broome, Edwin Warfield	Md.	Gaithersburg, Md.
Brown, Harold L.	Iowa	1700 15th Street
Brown, Ralph Waldo E.M., 1912, Lafayette College	D. C.	1489 Newton Street
Brown, Wilmarth	D. C.	Wardman Courts, South
Bull, Frank Arthur B.F., 1914, Biltmore Forest School	Maine	326 Maryland Ave., N.E.
Cannon, David Hoagland University of Utah	Utah	1215 10th Street
Castimore, Clarence A.B., 1912, Colgate University	N. Y.	130 East Capitol Street
Chamberlain, Ernest R. Washburn College; George Washington University	Kans.	1914 Pennsylvania Avenue
Collins, Philip LeRoy	D. C.	3708 Keokuk Street
Connor, Daniel Allman A.B., 1915, George Washington University	D. C.	130 D Street, S.E.
Cornell, Herbert Watson A.B., 1908, University of Colorado	Col.	119 Thomas Street
Davis, John Wesley B.S., 1914, Iowa Wesleyan College	Iowa	1830 H Street
De Aguero, Manuel	Cuba	1500 R Street
Demaree, Harry Stambaugh Lehigh University	Pa.	1916 16th Street
Desha, John Rollins A.B., 1912, Harvard University	Hawaii	House Office Building
Durfee, Gordon Adams University of Michigan	Ohio	1658 Park Road
Earll, Donald Montgomery George Washington University	Md.	1306 Euclid Street

Name	*Legal Residence*	*Address*
Ershler, Philip	N. Y.	The Alabama
Flickinger, Samuel John	N. J.	New Varnum Hotel
Floyd, Henry Bussey Phar.D., 1908, George Washington University	Ark.	Willard Courts
Foster, LeRoy B. Ph.C., 1909, Ohio State University	Ohio	1700 15th Street
Friedland, Karl Benjamin	Utah	3406 Georgia Avenue
†Fuller, Wiley Madison University of Texas	Texas	621 19th Street
Getchell, Leslie Wyman	Mass.	2022 F Street
Groome, William V. Washington and Lee University	Va.	1300 Pennsylvania Avenue
Haines, George Louis	D. C.	1340 R Street
Hardman, Frederick James B.S. in M.E., 1910, Case School of Applied Sciences	D. C.	1423 Newton Street
*Hastings, William Riley	Tenn.	620 Rock Creek Road
Heine, Henry William George Washington University	D. C.	502 Rhode Island Avenue
Heist, Luther H.	Pa.	1914 H Street
Hill, George Sidney George Washington University	Mass.	The Olympia
Hutton, Clark Holman Central University of Kentucky	Tenn.	1105 17th Street
Jeffrey, Earl Munro A.B., 1914, George Washington University	D. C.	3124 Wisconsin Avenue
Jewell, Jeannette	D. C.	1845 Columbia Road
Johannesen, Oscar Agricultural College of Utah	Idaho	2233 18th Street
*Jones, David Clyde A.B., 1910, Hamilton College	N. Y.	Patent Office
Keats, Harold A.B., 1912, George Washington University	D. C.	1810 Kalorama Road
Krafft, Walter E.	Ill.	1227 New York Avenue
Lauck, Lee G.	Va.	1445 Massachusetts Ave.
Lind, Charles A. Valparaiso University	Minn.	Patent Office

Name	*Legal Residence*	*Address*
Lindsay, Alfred Briscoe A.B., 1913, George Washington University	D. C.	832 Rittenhouse Street
Loebel, Stephanie	Roumania	1200 Massachusetts Ave.
McKinney, Stephen Booth Graduate 1907, U.S. Naval Academy	Tenn.	The Dupont
Mackay, Albert Calder A.B., 1915, University of Utah	Utah	The Riggs
Mann, Joseph Ernest	N. C.	1121 I Street
Marshall, Charles Orr University of Omaha	D. C.	709 Shepherd Street
Mielke, Frederick W.	Idaho	908 H Street
Miller, William Cammack A.B., 1911, Yale University	D. C.	Bond Building
Moore, Joseph Francis	Md.	Room 309, District Bldg.
Morris, Logan A.B., 1910, University of Utah	Utah	1333 15th Street
†Morrow, Henry Bascom, Jr.	Tenn.	Senate Office Building
Nebh, Frederick W. B.S., 1913, New York University	N. Y.	Y. M. C. A.
Nichol, James Wallace George Washington University	Mich.	Federal Trade Commission
Norris, Rhesa Miles George Washington University	Pa.	2121 O Street
Osoinach, John A. Mississippi State University	Miss.	226 11th Street, S.W.
Osoinach, Ruth Campbell	Miss.	226 11th Street, S.W.
O'Sullivan, Thomas Cullen Litt.B., 1914, Princeton University	N. Y.	1730 M Street
Paltridge, George Henry University of Michigan; University of Chicago	D. C.	1222 O Street
Parker, Arthur S.	D. C.	760 Columbia Road
Patterson, Robert Wilson George Washington University	D. C.	1309 Kenyon Street
Pendell, L. Elmer	N. Y.	2032 F Street

Name	*Legal Residence*	*Address*
*Pratt, James Lyman University of Pennsylvania	D. C.	2328 Nineteenth Street
Raymond, Norman Ticknor George Washington University	D. C.	1406 Allison Street
Reavis, Newton C. Vanderbilt University	Tenn.	1810 N Street
*Richards, Lawrence William	Utah	1225 L Street
Roberts, Iorwerth J. George Washington University	Pa.	1446 Meridian Street
Sanborn, George Allen A.B., 1912, George Washington University.	Wis.	2009 F Street
Shaw, Charles Jesse	Iowa	236 9th Street, N.E.
Smith, Andrew Adelbert B.S. in C.E., 1908, University of Wisconsin	Wis.	532 Taylor Street
Spaulding, Thomas Marshall A.B., 1905, University of Michigan; Graduate 1905, U. S. Military Academy	Mich.	1609 22d Street
Staton, Adolphus Graduate, 1902, U. S. Naval Academy	N. C.	Navy Department
Steele, Benjamin Porter George Washington University	D. C.	38 Seaton Place
Sterling, Ralph J. George Washington University	Ohio	2022 F Street
Stovall, Bates Mitchell	D. C.	The Cecil
Taylor, Edward Thomas, Jr., A.B., 1915, University of Colorado	Col.	Congress Hall Hotel
Taylor, Harry S.	Ind.	904 Massachusetts Avenue
Taylor, Perry E.	Texas	606 22d Street
*Towner, Horace Cole State University of Iowa	Iowa	The Mendota
*Turner, Van Arsdale Brown	Del.	Y. M. C. A.
Van Moss, Bert	Okla.	716 Navy Building
Volstead, Laura Ellen	D. C.	The Brighton
Voris, Hugh Allen A.B., 1909, Central University of Kentucky	Ky.	411 4th Street

Name	*Legal Residence*	*Address*
Ware, Kennard Nottingham University of Virginia	W. Va.	1700 15th Street
Wattawa, John A.B., 1913, University of Wisconsin	Wis.	Senate Post Office
Webster, Hugh B.S. in Agri., 1912, Iowa State College	D. C.	Y. M. C. A.
Witter, Lawrie L.	N. Y.	Y. M. C. A.
Wootton, Joseph Heber University of Utah	Utah	1409 15th Street

Third Year Class

Allen, James Thatcher	Ky.	121 12th Street, S.E.
Atherton, Wallace Irving University of Pennsylvania	Wash.	1100 Vermont Avenue
Babcock, Elwyn Claude	D. C.	20 Randolph Place
Baker, Lawrence Adams A.B., 1913, Princeton University	D. C.	3141 Highland Avenue
Bardwell, Halsey Warren Ph.B., 1910, Ewing College, Ill.	Vt.	11th & N Streets
Batt, Joseph Harper A.B., 1914, George Washington University	Del.	1402 L Street
Baxter, Chester C. S.B., 1908, Ohio Northern University	Ohio	1440 Meridian Place
Beadle, John Bookwalter George Washington University	D. C.	2523 14th Street
Bird, Branch Center College, Kentucky	Ky.	1331 K Street
Breuninger, Lewis T. A.B., 1913, Johns Hopkins University	D. C.	5700 16th Street
Brown, Alvin McCreary A.B., 1914, George Washington University	Md.	Berwyn, Md.
Bull, Charles Roy A.B., 1913, Bowdoin College	Maine	326 Maryland Ave., N.E
Burchfield, William Eden	D. C.	4429 Georgia Avenue

Name	*Legal Residence*	*Address*
*Burger, Alfred LL.B., February, 1916, George Washington University	N. Y.	Patent Office
†Burns, Walter William M.E., 1906, Cornell University	N. Y.	167 Patent Office
Burrows, Tremaine Kellogg A.B., 1897, University of Nebraska	N. Y.	6002 5th Street
*Butterwick, Leonard Lumley LL.B., February, 1916, George Washington University	N. D.	924 Maryland Ave., N.E.
Chamberlin, Pierre Audrey George Washington University	D. C.	1323 M Street
Clark, Marion A.B., 1901, A.M., 1904, Western Maryland University	Md.	1409 Fifteen Street
Claughton, Richard Edgar	D. C.	300 Commercial Bank Building
Cox, John Dee Southwestern University	Texas	4300 Kansas Avenue
Deal, Roy Linney A.B., 1911, George Washington University	Va.	745 Park Road
Desha, Stephen Langhern, Jr.	Hawaii	283 House Office Building
Dix, Howard Whedon M.E., 1911, Cornell University	N. Y.	1236 Euclid Street
Domer, Harry Tennyson A.B., 1900, A.M., 1903, George Washington University	D. C.	727 15th Street
Draeger, Henry Herman	S. D.	1810 N Street
Eudaley, Glenn Robert	Ky.	1117 Commerce Building
*Finckel, William Henry, Jr. LL.B., February, 1916 George Washington University	D. C.	1625 S Street
Fisher, Martin Tucker B.S., 1913, Harvard University	D. C.	1802 Wyoming Avenue

Name	*Legal Residence*	*Address*
Francis, Marshall H. Western Reserve University	Ohio	1331 K Street
Galloway, Andrew Barritt	Okla.	House Office Building
Geekie, George	Mass.	Interstate Commerce Commission
Gordon, William Alexander, Jr. Washingtin and Lee University	Mont.	3023 Q Street
Greene, John Thomas University of Utah	Utah	912 H Street
Gregg, Will Reeves A.B., 1913, Austin College	Texas	282 House Office Building
Gross, Robert Frank Graduate, 1907, U.S. Naval Academy	Cal.	105 The Woodward Apt.
*Grover, Charles Strauder B.S. in E.E., 1910, Purdue University; LL.B., February, 1916, George Washington University	Ind.	Patent Office
Haines, Elvans Diehl George Washington University	D. C.	1340 R Street
*Haugen, Lauritz G. University of Minnesota; LL.B., February, 1916, George Washington University	Iowa	1334 19th Street
*Haycraft, Everett Fairfield LL.B., February, 1916, George Washington University	Texas	23 Todd Place, N.E.
Haymes, Lonnie Slavens B.Pe., 1913, Springfield, Missouri, State Normal School	Mo.	Milburn Apartment
*Healy, Joseph Edward LL.B., February, 1916, George Washington University	Va.	1810 N Street
Henneman, Harry E.	Wis.	4229 Grant Circle
Hodgkins, Howard Wilkinson B.S. in C.E., 1913, George Washington University	D. C.	Patent Office
Hollingsworth, Roger P.	D. C.	2815 14th Street

Name	*Legal Residence*	*Address*
Hoover, John Edgar	D. C.	413 Seward Square, S.E.
Humphrey, Paul N.	Neb.	The Congressional
Hunt, Edwin Brendel	D. C.	4318 14th Street
Hunter, Rosser Lee George Washington University	D. C.	1700 15th Street
Hutchinson, Lewis Orrin A.B., 1910, Yale College	Conn.	604 Gresham Place
James, Joseph Pierson Leland Stanford University	Cal.	1504 R Street
Karrick, David Brewer A.B., 1914, Yale University	D. C.	2120 Bancroft Place
Kent, Henry J. George Washington University; Massachusetts Institute of Technology	D. C.	3145 Mt. Pleasant Street
Laporte, Ewing Mitchell	Mo.	U. S. Senate
Larkin, Neil Edwin	S. D.	800 10th Street
Larson, Randell J. A.B., 1913, University of North Dakota	N. D.	1749 Corcoran Street
Lee, Edward Brooke Princeton University	Md.	Silver Spring, Md.
Long, Franklin Samuel Valparaiso University	Ill.	2206 Flagler Place
McClellan, Edwin North University of Pennsylvania	Pa.	3 East Kirk Street, Chevy Chase, Md.
Marcus, M. Manning George Washington University	Wis.	1330 Massachusetts Ave.
*Marechal, Greer McInnis A.B., 1908, University of Alabama; LL.B., February, 1916, George Washington University	Ala.	321 Patent Office
Marsh, Harold Newman A.B., 1909, Bowdoin College	Maine	1204 Massachusetts Ave.
Monty, Willis Ellsworth	Vt.	610 22d Street
Morehouse, P Gad Bryan Cornell College, Iowa	D. C.	The Mellis
Morman, Raymond J.	Pa.	1331 Vermont Avenue
Morris, Daniel Leigh	D. C.	920 F Street
Myers, Paul Forest A.B., 1913, Princeton University	Pa.	1619 R Street

Name	*Legal Residence*	*Address*
Neal, Kenneth Stanely B.S., 1911, Worcester Polytechnic Institute	Conn.	Patent Office
Oberlin, John Jay A.B., 1901, Washington and Lee University	Md.	Patent Office
†Peck, George Curtis Stanley	D. C.	1101 Real Estate Trust Building
Phillips, Homer	D. C.	3327 18th Street
Pringle, Kenneth G.	Ill.	1333 15th Street
Rhoads, Thomas William	Pa.	1121 Eye Street
Robeson, Alexander C. Dartmouth College	D. C.	1887 Monroe Street
*Rogers, George Cephas LL.B., February, 1916 George Washington University	N. Y.	1755 Lamont Street
*Rush, Clifford Alvin LL.B., February, 1916, George Washington University	Kans.	2011 Columbia Road
Sanford, Claude Buren A.B., 1914, University of Tennessee	Tenn.	133 E Street
Savage, Henry J. B.S. in E.E., 1908, University of Michigan	Mich.	1227 Girard Street, N.E.
Semmes, Harry Hodges B.S., 1913, Dartmouth College	D. C.	2208 Q Street
Shaeffer, Glenn Marion	Kans.	Y. M. C. A.
Shaver, Homer Tipton A.B., 1913, Pacific University	Ore.	1333 15th Street
Shepard, William Wallace	Cal.	2011 Columbia Road
Shields, John Ridley	D. C.	1018 I Street, S.E.
Silver, Charles B. Chem., 1911, Cornell University	Md.	Patent Office
Smith, Henry Charles Albert Heidelberg University, Tiffin, Ohio	Ohio	314 East Capitol Street
Smith, Myron A. A.B., 1913, Austin College	Texas	289 House Office Building
Smith, Robert William	D. C.	625 F Street

Name	*Legal Residence*	*Address*
Sprague, Clarence Andrew B.S., 1904, Syracuse University	D. C.	3616 Newark Street
Springer, Lew Wallace A.B., 1914, George Washington University	N. Mex.	The Dresden
Stoddard, Alfred L. University of Wisconsin	Iowa	1916 16th Street
Tavener, Leslie James	N. Y.	131 U Street, N.E.
Thomas, George Kenneth A.B., 1914, Yale University	Col.	344 Senate Office Building
Thompson, Manly G.	Iowa	1424 R Street
Torgerson, Gustavus Maurice	Ala.	1916 16th Street
Underwood, Joseph Younglove Ogden College, Kentucky	D. C.	1402 L Street
Van Vleck, Arthur Nye	D. C.	Washington Loan and Trust Building
Vaughn, Orville R.	Tenn.	Bureau of Chemistry
*Walker, John Earl B.S., 1907, Kalamazoo College; B.S., 1907, University of Chicago; LL.B., February, 1916, George Washington University	Mich.	1730 M Street
Watson, Robert Clement C.E., 1913, Lehigh University	D. C.	3301 16th Street
Wiegand, Henry Frank B.S. in E.E., 1911, E.E., 1913, George Washington University	D. C.	210 The Eckington
Wilkins, Andrew Clifford State University of Illinois	Ill.	The Cecil
*Winstead, Chauncey Southerland	D. C.	1905 Park Road
Woodman, William Hidden B.S., 1908, Dartmouth College	N. J.	1333 15th Street
*Woolley, Arthur LL.B., February, 1916, George Washington University	Utah	1409 15th Street
Wright, Clarence Edward Agricultural College of Utah	Utah	1100 Vermont Avenue

Name	*Legal Residence*	*Address*
Wynne, Carl Monroe A.B., 1913, University of Missouri	Mo.	1788 Columbia Road

CANDIDATES FOR DEGREE OF MASTER OF LAWS

Anderson, Samuel Victor LL.B., 1915, George Washington University	Miss.	21 1st Street, N.E.
Bisson, Louis Alfred Worcester Polytechnic Institute; LL.B., 1915, George Washington University	Mass.	3011 Georgia Avenue
Crews, Chalsia E. LL.B., 1915, George Washington University	Mo.	2106 F Street
*DeWolf, Richard Crosby Massachusetts Institute of Technology; LL.B., 1913, George Washington University	Mass.	Library of Congress
Fitch, William Reed George Washington University, Department of Arts and Sciences; LL.B., 1915, George Washington University	N. D.	3614 Rock Creek Church
†Haugen, Lauritz G. University of Minnesota; LL.B., February, 1916, George Washington University	Iowa	1334 19th Street
*Hawley, Luther W. B.S., 1908, Worcester Polytechnic Institute, LL.B., 1914, George Washington University	Vt.	Patent Office
Jones, Shirley Penrose LL.B., 1915, George Washington University	Utah	1100 Vermont Avenue
Lane, Rufus Herman LL.B., 1895, George Washington University	Ohio	2310 20th Street

Name	*Legal Residence*	*Address*
Parmelee, Earle Linsley LL.B., 1915, George Washington University	Pa.	2011 Columbia Road
Read, Raymond Edgar LL.B., 1915, George Washington University	Mass.	War Department
Reinhardt, John Joy George Washington, University, Department of Arts and Sciences; LL.B., 1915, George Washington University	Neb.	1916 16th Street
†Rogers, George Cephas LL.B., February, 1916, George Washington University	N. Y.	1755 Lamont Street
Rogers, James Cunningham University of Pittsburg, LL.B., 1915, George Washington University	D. C.	901 Evans Building
Rose, Claude Custer M.E., 1905, Ohio State University; LL.B., 1914, George Washington University	Ohio	115 R Street, N.E.
Schenck, Arthur C. LL.B., 1915, George Washington University	D. C.	Federal Trade Commission
Van Wagoner, John D. LL.B., 1915, George Washington University	Utah	Y. M. C. A.
Warren, George A. LL.B., 1895, George Washington University	Ill.	1443 Massachusetts Ave.
Wham, Fred Louis LL.B. 1909, University of Illinois	Ill.	1741 Lanier Place
*Willis, George Bullock LL.B., 1914, LL.M., February, 1916, George Washington University	Va.	Route 3, Alexandria, Va.
†Wooley, Arthur LL.B., February, 1916, George Washington University	Utah	1409 15th Street

SPECIAL STUDENTS

Name	*Legal Residence*	*Address*
Allan, Ernest Anderson	Maine	Hamilton Hotel
Allen, Charles Risdon	D. C.	3311 22d Street, N.E.
†Bartholow, Edmond Montgomery A.B., 1909, University of Kansas	Kans.	41 Quincy Street
†Bebb, Edward Crosby B.S. in C.E., 1896, University of Wisconsin	Md.	Reclamation Service
Bennett, Chester Arthur	D. C.	321 Maryland Ave., N.E.
†Blackburn, Merrill Mason Ph.B., 1901, Grinnell College; LL.B., LL.M., 1914, Georgetown University	Iowa	433 6th Street, N.E.
*Bond, Lorenzo Owen	D. C.	1407 Perry Place
†Buchanan, Omar Bailey B.S. in E.E., 1913, George Washington University	D. C.	1207 Emerson Street
Campbell, James Bowman Ph.B., 1909, University of Vermont	Vt.	178 House Office Building
†Campbell, Jessie Miller D.D.S., 1888, National University; LL.B., 1910, Washington College of Law	Mo.	42 Rhode Island Avenue, N. E.
†Coffey, Richard John LL.B., 1915, Georgetown University	Pa.	1014 Massachusetts Ave.
Eccleston, Howard Richardson LL.B., National University Law School	Md.	The Balfour
Evarts, Edward Mark A.B., 1909, Harvard Uni- LL.B., 1915, National University Law School	Mass.	1858 Columbia Road
†Everett, Lloyd Tilghman LL.M., National University Law School	Va.	General Land Office
†Fowlkes, Maynard Grady	Va.	318 3d Street
†Fravel, Robert Hiram A.B., 1906, A.M., 1906, Randolph Macon College	Va.	1107 13th Street
†Friede, Charles William LL.B., 1915, Georgetown University	Mo.	1346 Fairmont Street

Name	*Legal Residence*	*Address*
Gitterman, Alice Masters Certificate, 1904, Teachers College, Columbia University; LL.B., 1910, Washington College of Law	Mich.	116 C Street, N.E.
†Golladay, J. Emerson LL.B., 1912, Georgetown University	D. C.	1254 Irving Street, Brookland, D. C.
Gordon, Hayner Haskell B.S. in E.E., 1908, E.E., 1909, Ph.D., 1911, George Washington University	Ohio	1755 Lamont Street
*Graser, Siegfried Otto D.D.S., 1901, National University, Medical Dept., Columbian University	Mich.	816 15th Street
Harris, Joseph William LL.B., 1908, National University Law School	Pa.	3105 18th Street
Hesselman, George J. LL.B., 1898, LL.M., 1899, George Washington, University	Md.	400 Shepherd Street, Chevy Chase, Md.
Hirsch, Morris B.S., 1911, College of the City of New York; LL.B., 1915, National University Law School	N. Y.	Patent Office
†Holland, George West LL.B., 1908, Georgetown University	Okla.	622 Rock Creek Church Road
*Johnston, Robert William	Mass.	1929 18th Street
†Kalaw, Maximo Manguiat LL.B., 1914, Georgetown University	P. I.	148, House Office Building
*Kause, Arthur John LL.B., 1913, LL.M., 1914, George Washington University	D. C.	221 Post Office Dept.
†Kemmerer, Charles Tilghman Ph.B., 1903, State University of Iowa	Iowa	General Land Office
Kingsbury, William Stephen	Cal.	1401 Fairmont Street
†Leger, Benoit Leland B.E., 1911, University of Michigan	N. Y.	715 5th Street, N.E.
Luttrell, Nathaniel Horace	Va.	2101 Connecticut Avenue

Name	*Legal Residence*	*Address*
*Mann, Lester Bradwell B.S. in C.E., 1907, Georgia School of Technology	Ga.	Patent Office
†Manning, Harold Grosvenor S.B., 1912, Massachusetts Institute of Technology	Mass.	1814 Park Road
*Miller, Charles F. Frederick	Ohio	19 Quincy Place
†*Moore, James Ballard LL.B., 1913, George Washington University	D. C.	Patent Office
Moore, Percy H.	D. C.	918 F Street
*Pherson, William Russell	Ohio	1407 Massachusetts Ave.
Pilcher, Dalton Jefferson	D. C.	Y. M. C. A.
†Powers, John Daniel	Mass.	1233 10th Street
†*Ragsdale, Robert Arthur	Ark.	387, House Office Building
†Rosenthal, Aaron Bernhard University of Wisconsin	Wis.	1437 Rhode Island Avenue
Ryan, James A.	Minn.	510 Y. M. C. A.
*Siegfried, Alvin	S. D.	18 Iowa Circle
†Silver, Edwin Herman University of Rochester	N. Y.	908 F Street
†Snelling, Henry Hornor B.S. in M.E., 1913, George Washington University	Va.	3522 10th Street
Stone, Claudius Ulysses B.S., Western Illinois Normal College	Ill.	Woodward Apartments
†Swanton, Walter Irving B.S. in C.E., 1893, Massachusetts Institute of Technology	Mass.	1464 Belmont Street
Swen, John Broadus	D. C.	905 Massachusetts Avenue N.E.
Veach, Robert Spangler	Va.	1300 Pennsylvania Avenue
Walker, Morton Blaine	N. Y.	Y. M. C. A.
†Watts, Blythe Davison B.S. in Chem., 1912, Pennsylvania State College	Pa.	181 Uhland Terrace, N.E.
West, David A.	Utah	32 The Plymouth
†Whitten, William Henry, Jr., B.S., 1896, M.S., 1897, Massachusetts Institute of Technology	Ill.	1307 Fairmont Street

Name	*Legal Residence*	*Address*
Willard, Charles Nelson Indiana State Normal College; LL.B., 1912, Valparaiso University	Kans.	1208 K Street
Willson, Charles Carter LL.B., 1914, National University Law School	D. C.	Y. M. C. A.
York, Warren Monroe	D. C.	509 East Capitol Street

SUMMARY

Candidates for Degree of Bachelor of Laws

First Year	145
Second Year	98
Third Year	106
Total	349
Candidates for degree of Master of Laws	21
Total	370
Counted twice	3
Total candidates for degrees	367
Special students	57
Total all students	424
Candidates for degrees who are college graduates	103
Percentage	27.99
Candidates for degrees who have had all or part of a college course	214
Percentage	58.15

COLLEGE GRADUATES, CANDIDATES FOR DEGREES

Alabama, University of	1	Michigan, University of	3
Austin College	2	Military College of South Carolina	1
Bowdoin College	2	Minnesota, University of	1
Butler College	1	Mississippi, University of	1
Campbell College, Holton, Kansas	1	Missouri, University of	2
Case School of Applied Sciences	2	Nebraska, University of	2
Central University of Iowa	1	New York University of	1
Central University of Kentucky	1	North Carolina, University of	1
Chicago, University of	1	North Dakota, University of	1
Colby College	1	Ohio Northern University	1
Colgate Univerity	1	Ohio State University	1
College of the City of New York	1	Pacific University	1
Colorado, University of	2	Pennsylvania, University of	1
Cornell University	4	Princeton University	4
Dartmouth College	3	Purdue University	1
Delaware College	1	Swarthmore College	1
Dickinson College	1	Syracuse University	1
Ewing College	1	Tennessee, University of	1
Georgetown College	2	U. S. Military Academy	1
George Washington University	13	U. S. Naval Academy	6
Georgia, University of	2	Utah, University of	3
Hamilton College	1	Washington and Jefferson College	1
Harvard University	3	Washington and Lee University	2
Iowa State College	1	Western Maryland University	1
Iowa Wesleyan College	1	William and Mary College	1
Johns Hopkins University	1	Wisconsin, University of	2
Kalamazoo College	1	Worcester Polytechnic Institute	2
Lafayette College	1	Yale University	4
Lehigh University	3		106
Maryland Agricultural College	1	Counted twice	3
Massachusetts Institute of Technology	1	Total	103

NATIONAL COLLEGE OF PHARMACY

CANDIDATES FOR THE DEGREE OF DOCTOR OF PHARMACY

Freshmen

Name	*Legal Residence*	*Address*
Bjorgo, Raymond Edwin	Iowa	1207 Connecticut Avenue
Blue, Norman Rockwell	D. C.	812 I Street
Bowman, Clayton Lawrence	Va.	609 S. Washington Street, Alexandria, Va.
Brown, Earl Luvern	Iowa	701 1st Street
Dean, Ralph Edward	Md.	348 Cedar Street, Takoma Park, D. C.
Faulkner, Halbert Laird	Texas	1330 B Street, S.E.
Flemer, Henry Lewis	D. C.	701 Maryland Ave., N.E.
Fuhrman, Wallace Joseph	D. C.	724 East Capitol Street
Glycofrides, Ellis Eustace	Turkey	925 9th Street
Hughes, Stevens	D. C.	2226 N Street
Li, Kang	China	2014 Kalorama Road
McIntyre, Joseph Daniel	D. C.	3048 M Street
Nugent, Francis Xavier	Va.	Alexandria, Va.
Poston, Lilborn Montgomery	Va.	1224 13th Street
Schwartz, Martin Seymour	N. Y.	116 North Carolina Ave., S.E.
Thornton, Latha Clare	Ala.	408 2nd Street, N.E.

Juniors

Bradshaw, Walter Nelson	Va.	Herndon, Va.
Burley, Allan	Va.	129 Thomas Street
Dement, William Edward	D. C.	619 North Carolina Avenue, S.E.
Fegan, Frances Elizabeth	D. C.	493 H Street, S.W.
Flemer, George Roosevelt	D. C.	701 Maryland Ave., N.E.
Frailey, William Albert	Md.	The Sherman
Johnson, Perry Marshall	Va.	120 S. Henry Street, Alexandria, Va.
Norris, Walter Benton	Md.	811 13th Street
Paylor, Russel Stute	N. C.	739 9th Street
Wedding, William Conrad	D. C.	18 6th Street, N.E.
Williams, Thomas Franklin	Va.	14th and Massachusetts Avenue

Seniors

Name	*Legal Residence*	*Address*
Arnold, Howard Leslie	Va.	222 N. Patrick Street, Alexandria, Va.
Blumberg, Alfred Ph.M., 1905, Royal Francis Joseph University, Temesvar, Hungary	Mont.	203 9th Street, S.W.
Colahan, John Thompson B.T., 1902, St. Mary's Seminary, Baltimore, Md.	Md.	Rockville, Md.
Davis, Paul Roscoe	Pa.	11½ Grant Place
Donahue, Thomas Francis	D. C.	3345 P Street
Dudley, James Walter	D. C.	Takoma Park, D. C.
Fink, James Albert	D. C.	1826 15th Street
Gaines, John Marshall	Va.	114 North Alfred Street, Alexandria, Va.
Kelley, James William	Va.	Bureau of Chemistry
Kiefer, Ralph Sylvester	Pa.	6907 6th Street
Leon, Manuel Benitez	Cuba	318 3rd Street
Minick, George Vail	Pa.	300 11th Street, S.E.
Painter, Archie Carlyle	D. C.	501 6th Street, N.E.
Payewski, Peter Joseph	Russia	701 Maryland Ave., N.E.
Riley, Albert Austin	Ohio	1375 Columbia Road
Snider, Clyde Elwood	Kansas	730 13th Street
Stewart, William Alfred Turner	Idaho	1407 Rhode Island Avenue
Williams, Clyde Gray	Pa.	1014 Pennsylvania Avenue, S.E.

SPECIAL STUDENTS

Jessup, Claude Edward	Mich.	2014 F Street
Potter, Alden Archibald B.S., 1909, University of Minnesota	Minn.	Cherrydale, Va.
White, Gershom Franklin M.D., 1909, George Washington University	N. Y.	1332 Vermont Avenue

SUMMARY

Freshman	16
Junior	11
Senior	18
Special	3
	48

COLLEGE OF VETERINARY MEDICINE

CANDIDATES FOR THE DEGREE OF DOCTOR OF VETERINARY MEDICINE

FRESHMAN

Name	*Legal Residence*	*Address*
Ashton, Charles Paul	D. C.	339 8th Street, N.E.
Baessell, Norman	D. C.	709 Columbia Road
Bengel, William Godman	D. C.	3530 Warder Street
Biester, Harry Edward	Ill.	326 Indiana Avenue
Bookhultz, John Milford	D. C.	1536 9th Street
Brennan, John Francis	D. C.	825 8th Street, N.E.
Chauncey, Depew Thomas	Va.	Alexandria, Va.
Curtice, Frederick Hosé	Va.	Clarendon, Va.
Dawson, Harry Hampden	Va.	105 2nd Street, N.E.
Dodge, Vernob Bishop	D. C.	708 Quincy Street
Dodge, Walter Spencer	D. C.	742 Rock Creek Church Road
Drinkwater, Louis Percival	Maine	706 20th Street
Evans, Harley Parker	D. C.	1240 New Jersey Avenue
Fell, Thomas Buckley	Wash.	931 K Street
Gehres, John Zirby	Pa.	1224 13th Street
Holland, Fred G.	D. C.	1215 29th Street
Julian, Fred Newman	D. C.	1824 H Street
Khuen, Edward Charles	D. C.	119 G Street
King, John Joseph	Va.	2308 P Street
Knowles, John Audrey	Md.	Riverdale, Md.
Kritt, Abe	D. C.	2147 P Street
Leary, Arthur Michael	Conn.	706 20th Street
Melvin, Fordyce Harriman	D. C.	1751 Park Road
Mims, Malcus Carson	N. C.	1121 I Street
Mohler, William Melvin	D. C.	1620 Hobart Street
Newman, Raymond W.	Cal.	1401 Massachusetts Ave.
Patterson, James	Va.	Alexandria, Va.
Phillips, Carlton Latimer	Va.	723 Euclid Street
Romberger, Earl Ellsworth	Pa.	708 19th Street
Sinclair, Francis Mallory	Va.	723 Euclid Street
Stedman, Royal Benjamin	D. C.	929 C Street, S.W.

SOPHOMORES

Name	*Legal Residence*	*Address*
Carl, John Clarence	N. C.	1939 35th Street
Chase, Lester Gilbert	Maine	1403 12th Street
Criswell, Lindsay Leland	Ind.	518 B Street, N.E.
Dennewitz, Homer Arresta	Ohio	Y. M. C. A.
Haas, Joseph Peter	Pa.	927 New York Avenue
Hines, Laurence Irwin	Neb.	215 9th Street, S.W.
Johnson, Burnett Carpenter	Minn.	533 Newton Street
Kelley, John Francis	Mass.	1215 K Street
Kelser, John Oscar	D. C.	231 14th Street, N.E.
Lanahan, Frank Robert	D. C.	612 G Street, S.W.
Oyster, Francis Larmour	D. C.	612 East Capitol Street
Price, Emmett William	W. Va.	1320 W Street
Seymour, Walter Eugene	Ohio	914 Massachusetts Avenue
Wessell, Francis Henry	Conn.	706 20th Street

JUNIORS

Lawych, Louis	N. Y.	531 Gresham Place
Lewis, Ralph Henry	Md.	Riverdale, Md.
Nichols, Robert Lee	Md.	Laurel, Md.
Pulsifer, Walter Clyde	N. H.	317 F Street, N.E.
Savage, Howard Mayo; A.B., 1899, College of Emporia, Emporia, Kansas	Ill.	1117 Vermont Avenue
Wright, Willard Hull	Ohio	3028 Park Place

SENIORS

Berg, William Nathan B.S., 1904, Ph.D., 1907, Columbia University	N. Y.	819 C Street, S.W.
Biondi, Harry James	D. C.	508 7th Street, S.E.
Brown, Herbert Hyde	Mo.	The Alabama Apts.
Buffin, Kenneth Earl	Md.	Chevy Chase, D. C.
Grubb, William Hugh	Va.	1320 W Street, N.W.
Hall, Maurice Crowther; S.B., 1905, Colorado College; A.M., 1906, University of Nebraska; Ph.D., 1915, George Washington University	D. C.	1815 Hamlin Street, N.E.
Lynn, William Monro	N. C.	201 I Street, N.W.
Munro, Joseph Briggs	R. I.	420 Columbia Road

Name	*Legal Residence*	*Address*
Rippon, Charles William	Pa.	2115 14th Street, N.W.
Sipos, Andrew James	Va.	2115 14th Street, N.W.
Skippon, Charles David	Pa.	2008 1st Street, N.W.
Thigpen, Claude	Ala.	1901 L Street, N.W.
Wilcox, Floyd Percy	N. Y.	1536 9th Street, N.W.

SPECIAL

Schaefer, John Wesley	Va.	420 Columbia Road

SUMMARY

Freshman	31
Sophomore	14
Junior	6
Senior	13
Special	1
	65

STUDENTS ENROLLED 1914–15 TOO LATE TO BE INCLUDED IN THE MARCH CATALOGUE

SCHOOL OF GRADUATE STUDIES

Student in Attendance

Perkins, Granville Akers		
A.B., 1913, Cornell University	Ohio	
Topic—Chemistry	Ark.	Y. M. C. A.

COLUMBIAN COLLEGE

Beer, Richard C.	N. Y.	Hotel Richmond
Carney, Joseph T.	Ohio	1126 8th Street, N.E.

COLLEGE OF ENGINEERING

Feldstein, Harry C.	D. C.	1314 13th Street

LAW SCHOOL

Mann, Lester B.	Ga.	Patent Office

GEOGRAPHICAL DISTRIBUTION

Alabama	11	South Carolina	9
Arizona	1	South Dakota	10
Arkansas	7	Tennessee	20
California	11	Texas	26
Colorado	11	Utah	29
Connecticut	17	Vermont	6
Delaware	6	Virginia	109
District of Columbia	858	Washington	9
Florida	3	West Virginia	16
Georgia	9	Wisconsin	29
Idaho	4	Wyoming	1
Illinois	64	Brazil	1
Indiana	15	Canada	3
Iowa	24	Central America	1
Kansas	15	China	9
Kentucky	11	Cuba	4
Louisiana	7	England	1
Maine	11	Germany	1
Maryland	102	Greece	1
Massachusetts	43	Hawaii	3
Michigan	27	Holland	1
Minnesota	16	India	4
Mississippi	5	Italy	1
Missouri	26	Japan	6
Montana	5	Mexico	1
Nebraska	12	Panama	2
New Hampshire	7	Philippine Islands	4
New Jersey	21	Persia	2
New Mexico	5	Porto Rico	9
New York	103	Roumania	1
North Carolina	22	Russia	5
North Dakota	8	South Africa	1
Ohio	48	Sweden	2
Oklahoma	12	Turkey	1
Oregon	4		
Pennsylvania	84		1973
Rhode Island	10		

GENERAL SUMMARY

TEACHING STAFF

(Omitting Faculties of Associated Colleges)

In many instances members of the Teaching Staff give only part time to the University:

Professors	81	
Associate Professors	9	
Associates	9	
Assistant Professors	19	
Lecturers and Instructors	84	
Assistants and Demonstrators	32	
Total	234	

STUDENTS REGISTERED IN THE UNIVERSITY DURING 1915-16

Department of Arts and Sciences

School of Graduate Studies	115	
Columbian College	699	
College of Engineering	231	
Teachers College	152	
	1197	
Duplicates	3	1194

Professional Schools

Medical School	149	
Dental School	126	
Law School	424	
		699

Associated Colleges

National College of Pharmacy	48	
College of Veterinary Medicine	65	113
		2006
Duplicates		33
		1973

DEGREES CONFERRED

AT COMMENCEMENT, 1915

HONORARY

Doctor of Laws

William Healey Dall
Otto Hilgard Tittmann

Doctor of Medicine

Shepherd Ivory Franz

Master of Arts

Glenn Brown

IN COURSE

Doctor of Philosophy

Samuel Palkin.....District of Columbia
Ph.B., 1910, Yale University; S.M., 1913, George Washington University

Ulysses Grant Baker Pierce.....District of Columbia
B.D., 1890, Hillsdale College; A.B., 1909; D.D., 1909, George Washington University

Joseph Duerson Stout.....District of Columbia
A.B., 1910; M.D., 1913; A.M., 1914; George Washington University

Master of Arts

Edith Cheney.....District of Columbia
A.B., 1914, George Washington University

Charles Elmer Resser.....District of Columbia
B.Pd., 1912, Millersville State Normal School; A.B., 1913, Franklin and Marshall College

Tsoo-Chen Shen.....China
A.B., 1909, St. John's College, Shanghai, China

Master of Arts and Master's Diplomas in Education

John Absalom Garber.....District of Columbia
A.B., 1891, Bridgewater College

Walton Colcord John.....Maryland
A.B., 1914, George Washington University

Cora Amelia Ossire.....District of Columbia
A.B., 1913, George Washington University

Claus Johann Schwartz.....Germany
A.B., 1908, George Washington University

Master of Science

Lloyd Huber Almy.....Illinois
S.B., 1909, University of Illinois
Katherine Burden.....District of Columbia
A.B., 1914, George Washington University
Frank Cooper Craighead.....Pennsylvania
S.B., 1912, Pennsylvania State College
Showell Coulbourn Dennis.....Maryland
B.S. in Chem. 1912, Maryland Agricultural College
Maxwell Oscar Johnson.....Indiana
B.S. in Chem. Eng., 1913, Purdue University
Louis Archer Maxson.....Maryland
A.B., 1913, George Washington University
Kate Sorrell Outwater.....Virginia
A.B., 1913, George Washington University
Lewis Radcliffe.....New York
A.B., 1905, Cornell University
William Kean Robinson.....Virginia
B.S. in Chem., 1913, Maryland Agricultural College

Civil Engineer

John Dominic McCormick.....District of Columbia
B.S. in C.E., 1914, George Washington University
Herbert Paul Middleton.....New York
B.S. in C.E., 1914, George Washington University
Malcolm Gordon Slarrow.....District of Columbia
B.S. in C.E., 1913, George Washington University

Electrical Engineer

Clyde Malcolm Hamblin.....District of Columbia
S.B., 1914, Oklahoma Agricultural and Mechanical College

Mechanical Engineer

Arthur Frederick Johnson.....District of Columbia
Graduate, 1911, Webb Academy

Bachelor of Arts

Edwin Franklin Albertsworth.....District of Columbia
Walter Lesesnes Anders.....Texas
Ruth Leah Ayler.....District of Columbia
Leighton Dwelle Beckett.....Iowa
Ralph Webster Benton.....District of Columbia
(With distinction)
Martha Noyes Birnie.....District of Columbia
Walter Andrew Bloedorn.....District of Columbia

Robert Allen Castleman, Jr.....Maryland
Daniel Allman Connor.....District of Columbia
Anna Washington Craton.....North Carolina
Eddie Dickert.....Virginia
Victor Dulac.....District of Columbia
Ella Morgan Austin Enlows.....District of Columbia
(With distinction)
Alice Eleanor Griffith.....District of Columbia
Otto Carl Gsantner, Jr.....District of Columbia
Sylvia Jane Hazlett.....Pennsylvania
John Heath.....District of Columbia
Condor Caywood Henry.....Tennessee
George Wilson Hodgkins.....District of Columbia
(With distinction)
Flora Hull.....Nebraska
Joseph Bush Kingsbury.....Iowa
Harriet Catherine Lasier.....New Hampshire
Summerfield McCarteney.....Virginia
Agnes E. G. Nelson.....Wisconsin
(With distinction)
Frederika Neumann.....District of Columbia
(With distinction)
Edgar Raymond Piper.....Connecticut
William Henry Powell.....Virginia
Rudolph Emil Schoenfeld.....District of Columbia
Letitia Park Southgate.....District of Columbia
William Lawrence Wanlass.....Utah
Everil Worrell.....District of Columbia

Bachelor of Arts and Bachelor's Diploma in Education

Mary Brown.....District of Columbia
Helen Elizabeth Cam.....District of Columbia
Ina Dean Eddingfield.....District of Columbia
(With distinction)
Freda Dorothy Egbert.....District of Columbia
(With distinction)
Alton Arnold Gladden.....Maryland
Florence Marcellina Kerby.....District of Columbia
Nellie Rae MacFarlane.....District of Columbia
Florence Ethel Milliken.....District of Columbia
(With distinction)
Nelle Freeland Patrick.....Oklahoma
Wellington Patrick.....Oklahoma
Ruth Capelle Patterson.....District of Columbia
Elsie Sanders.....District of Columbia
Mary Mabel Stewart.....District of Columbia
A.B., 1914, Grove City College

Marion True.....District of Columbia
Mary Siphora Tyndall.....District of Columbia
Alberta Walker.....District of Columbia
(With distinction)
Elizabeth Anna Weber.....New York
(With distinction)
Louise Worster.....District of Columbia
Bessie Lee Yoder.....District of Columbia

Bachelor's Diploma in Education

Winifred Mary Kuhns.....Maryland
A.B., 1914, Randolph-Macon Woman's College

Bachelor of Science in Chemistry

John Francisco Brockwell.....North Carolina
Roger Melville Mehurin.....District of Columbia
Duncan Campbell Smith.....Maryland
Melville Ralph Walton.....Illinois

Bachelor of Science in Medicine

George von Pullinger Davis.....District of Columbia
M.D., 1910, George Washington University

Bachelor of Science in Architecture

Raymond Sagar Hart.....District of Columbia
Charles Sumner Mason.....District of Columbia

Bachelor of Science in Civil Engineering

Charles Wightman Barber.....District of Columbia
Erwin Harsch.....Ohio
(With distinction)
Robert Lincoln Kause.....Ohio
Herman A. Kuehn.....Indiana
Roger Daniel Wharton.....District of Columbia

Bachelor of Science in Electrical Engineering

William Wright Fraser.....Maryland
A.B., 1905, New Windsor College; LL.B., 1911, George Washington University
Earl Cletus Laughlin.....Wisconsin

Bachelor of Science in Mechanical Engineering

Harold DeWolf Hatfield.....Canada
S.B., 1910, Connecticut State College
Clinton Inness McClure.....Kansas

Doctor of Medicine

Francis Vernon Atkinson.....District of Columbia
Carroll Edward Bingman.....Pennsylvania
Benjamin Charles Blake.....Louisiana
Thomas Creasy Bost.....North Carolina
Jeter Carroll Bradley.....North Carolina
Edward Allan Brown.....Virginia
Earl Burton Carr.....New York
James Harold Collins.....District of Columbia
A.B., 1907, Bowdoin College
Floyd Chapin Dean.....New York
Horatio Roger DeLuca.....New Jersey
Frederick Young Donn.....District of Columbia
Phar.D., 1904, National College of Pharmacy; Ph.G., 1908, Medical-Chirurgical College of Pharmacy
Merton Alden English.....District of Columbia
Cleon Joseph Gentzkow.....Minnesota
(With distinction)
Eric Steel Green.....New York
Albert Walton Kenner.....Virginia
Phar.D., 1910, George Washington University
Samuel Herman Lippitt.....New York
(With distinction)
Arthur Howard McCray.....Ohio
S.B., 1909, Ohio State University; D.V.M., 1911, George Washington University
Joseph deRoulhac Moreno.....Florida
Harry Newton Moser.....Pennsylvania
William Frederick Passer.....Minnesota
Ph.G., 1904, University of Minnesota
Paul Stirling Putzki.....District of Columbia
(With distinction)
Robert Read Rafter.....District of Columbia
Charles Edward Ralph.....Illinois
Ira Alonzo Rowlson.....New York
Allen Grover Zeagler.....Louisiana

Nurse's Certificate

Mildred Key Beall.....Virginia
Leah Cauthorne.....Virginia
Gladys Lenore Heatley.....Canada
Elsie May Meredith.....Maryland
Elizabeth Metz.....Maryland
Emma Jane Mitchell.....Virginia
Donna Irene Oliver.....Virginia
Bertie Mayree Peck.....West Virginia
Rose Tinsman.....Virginia

Doctor of Dental Surgery

Delmar Davis Brower.....Virginia
Josiah Lawrence Carr.....Texas
John Anthony Flood.....New Jersey
Joseph Altshuler Friedman.....District of Columbia
Raymond Odo Higgings.....Nebraska
Golda Minkin.....Russia
Joseph Ralph Palkin.....Connecticut
Carl Heisler Schmidt.....Massachusetts
Edward Markom Slack.....District of Columbia
Richard Knight Thompson.....District of Columbia
Edwin Ross Tilley.....District of Columbia
Lawrence Reginald Wagner.....New York
Douglas Alfred White.....Massachusetts

Master of Laws

Henry George Atkinson Black.....Massachusetts
LL.B., 1914, George Washington University
Marion Snow Tanner.....Utah
A.B., 1911, University of Utah; LL.B., 1914, George Washington University
Julian M. Thomas.....Utah
LL.B., 1913, University of Utah

Bachelor of Laws

John West Addison.....Virginia
A.B., 1905; A.M., 1906, Washington and Lee University
Samuel Victor Anderson.....Mississippi
(With distinction)
Charles Morrison Austin .....Tennessee
Graduate, 1905, U. S. Naval Academy
Elbert Baker Baldridge.....Tennessee
A.B., 1905, Asbury College
John Lester Barr.....District of Columbia
A.B., 1910, Harvard University
Louis Alfred Bisson.....Massachusetts
Hilarion Noel Branch.....Mexico
Leslie Emmett Bratton.....Nebraska
Graduate, 1907, U. S. Naval Academy
Lee Hoxie Brown.....District of Columbia
Benjamin Franklin Chesky.....Connecticut
William Cornelius Coryell.....Kentucky
A.B., 1906, Ohio Wesleyan University
Chalsia E. Crews.....Missouri
Harold Franklin Enlows.....District of Columbia
Budd Evans.....Minnesota
Alfred Hardin Frederick.....Texas

Elmer Vernon Griggs.....Iowa
B.S. in E.E., 1908; B.M.E., 1909, Iowa State College
Lunsford Loving Hammer.....District of Columbia
A.B., 1913, University of Virginia
James Henry Hawley, Jr.....Idaho
Fleming Clay Haymond.....Indiana
Julius Christian Jensen.....Iowa
Ross Holbrook Johnson.....District of Columbia
Franklin Daniel Jones.....Illinois
A.B., 1910, State University of Iowa
Shirley Penrose Jones.....Utah
William F. Kelly, Jr.....District of Columbia
John Monteith McFall.....South Carolina
A.B., 1904, College of Charleston; A.M., 1906, Columbia University
(With distinction)
Robert Byers Meckley.....Pennsylvania
B.S. in E.E., 1908, Pennsylvania State College
Rawles Moore.....Kentucky
Robert Virgil Morse.....New York
M.E., 1911, Cornell University
Earle Lindsley Parmelee.....Pennsylvania
James Francis Pierce.....Michigan
B.C.E., 1912, University of Michigan
(With distinction)
Raymond Edgar Read.....Massachusetts
John Joy Reinhardt.....Nebraska
James Cunningham Rogers.....District of Columbia
Arthur C. Schenck.....District of Columbia
James William Schmied.....Ohio
B.S., 1910, Ohio Northern University
Randolph Codman Shaw.....District of Columbia
Archer Roberts Simpson.....Massachusetts
A.B., 1911, Yale University
Samuel Sisisky.....Connecticut
Breedlove Smith.....Texas
A.B., 1912, Austin College
Elton Wood Stanley.....South Dakota
Elmer Stewart.....District of Columbia
B.S. in Chem., 1912, George Washington University
Jesse Raymond Stone.....Wisconsin
B.Litt., 1899, University of Wisconsin....
Alfred Wright Thompson.....District of Columbia
Samuel D. Thurman.....Utah
Homer A. Whitehorn.....Nebraska
A.B., 1908, Nebraska Wesleyan University

Laurence Norton Wilson.....Idaho
(With distinction)
John Womack Wright.....Tennessee
(As of 1898)

Doctor of Pharmacy

Anna May Borland.....Michigan
Andrew Jackson Brown.....North Carolina
A.B., 1912, Roanoke College
Thomas Benton Crisp, Jr.....District of Columbia
Morris Gersel Goldstein.....Russia
Harry Roland Kenner.....District of Columbia
Garland Sydnor Kerfoot.....Virginia
Clarence Victor Kimball.....North Carolina
Samuel Aaron Lantz.....Virginia
A. J. Minkin.....Russia
E. Ervin Modena.....Virginia
Earl Maydwell Norris.....Maryland
Lyman Brooke Tibbits.....District of Columbia
J. William Umhau.....District of Columbia
Paul William Vestal.....North Carolina

AT WINTER CONVOCATION, 1916

IN COURSE

Doctor of Civil Law

Clarence Alphonso Miller.....Mexico
LL.B., 1899, Kansas City School of Law; LL.M., 1905, M.Dip., 1906, George Washington University

Bachelor of Arts

Lucy Kyle Burleson.....Texas
Lewis Katzen Ellenbogen.....New York
Ewart William Hobbs.....Illinois
(With distinction)
Carl Ober Spamer.....Maryland

Bachelor of Science in Civil Engineering

Prentiss Dixon Sale, Jr.....District of Columbia

Master of Laws

George Bullock Willis.....Virginia
LL.B., 1914, George Washington University

Bachelor of Laws

Alfred Burger.....Virginia
Leonard Lumley Butterwick.....North Dakota

William Henry Finckel, Jr.....District of Columbia
Charles Strauder Grover.....Indiana
B.S., in E.E., 1910, Purdue University
Lauritz G. Haugen.....Iowa
Everett Fairfield Haycraft.....Texas
Joseph Edward Healy.....Virginia
Greer McInnis Marechal.....Alabama
A.B., 1908, University of Alabama
(With distinction)
George Cephas Rogers.....New York
Clifford Alvin Rush.....Kansas
John Earl Walker.....Michigan
S.B., 1907, Kalamazoo College; S.B., 1907, University of Chicago
Arthur Woolley.....Utah

Doctor of Dental Surgery

Blanca Dimas.....Porto Rico
Griffin Guy Frazier.....District of Columbia
Arthur Ruebun Hall.....District of Columbia
William Joseph O'Brien.....Connecticut
Thomas Lloyd Sampsell.....District of Columbia

ALLIED ASSOCIATIONS

ALUMNI ASSOCIATIONS

THE GENERAL ASSOCIATION

Officers, 1915–1916

President

STEPHEN E. KRAMER

Vice-Presidents

PERCIVAL HALL
JOHN PAUL EARNEST
HENRY W. DRAPER
E. G. SEIBERT
MARK R. WOODWARD
DELOS M. SMITH

Secretary

HOWARD L. HODGKINS

Treasurer

JOHN B. LARNER

Executive Committee

STEPHEN E. KRAMER, *Chairman*
HOWARD L. HODGKINS, *Secretary*

L. RUSSELL ALDEN
E. ROGER BOYLE
WALTER C. CLEPHANE
DR. E. M. COLVIN
DR. S. DANEMANN
HARRY C. DAVIS
HENRY W. DRAPER
JOHN PAUL EARNEST
M. ELLA GIVEN
PERCIVAL HALL
DR. A. W. KENNER
H. H. KIMBALL
JOHN B. LARNER
DR. H. S. LEWIS
DR. R. E. MADIGAN
H. P. MIDDLETON
SOTERIOS NICHOLSON
DR. E. G. SEIBERT
DELOS H. SMITH
ELNER STEWART
DR. M. F. THOMPSON
MARK R. WOODWARD
BESSIE L. YODER

Since its organization in 1821, the University has conferred 8499 degrees upon 6918 persons.

The Secretary of the General Alumni Association, whose office is at the University, endeavors to keep a list of the addresses of all Alumni.

His catalogue now contains the addresses of about 4200 graduates. It is known that about 1400 are dead, and information is lacking in regard to the others. All Alumni are urged to keep the Secretary informed of any change of address or occupation, and to supply information in regard to their fellow Alumni.

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VOLUME XV NUMBER 2

George Washington University Bulletin

GEORGE WASHINGTON UNIVERSITY
ITS GROWTH AND INDIVIDUALITY

BY
RICHARD COBB
Secretary of the University

PUBLISHED BY THE UNIVERSITY
WASHINGTON, D. C.

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Volume XV, Number 2,

June, 1916

PUBLISHED FOUR TIMES A YEAR: IN MARCH, JUNE, OCTOBER AND DECEMBER

Entered October 6, 1904, at Washington, D. C., as second-class matter under Act of Congress of July 16, 1894.

versity was early plunged into financial straits which became a self perpetuating inheritance passed on from one generation of trustees to another.

"Annual income twenty pounds, annual expenditure nineteen six, result happiness. Annual income twenty pounds, annual expenditure twenty pounds aught and six, result misery;" and Dickens might have added degradation. It is difficult for an individual to recognize the necessity of retrenching; it is more difficult for a group of men to agree on such a necessity. Divided responsibility for an institutional debt may not be felt by any one man as his personal liability. It is easy to compromise; and the obligations of one group of men may be wholly lost sight of by another. The ever recurring bequest from generation to generation of exacting financial stringency accompanied by apparent obligation to live and to serve brought with it not illogically a spasmodically increasing amount of forgotten financial obligation.

After the horse has been stolen it is easy to say that the barn door should have been locked not merely closed in a makeshift way; but at the time when the door ought to have been locked, if there was no lock, a beam put against it might have seemed excusable. One explanation of the impaired endowment fund lies in such seemingly excusable makeshifts. An early item in the Attorney General's report furnishes illustration. In 1822 the Trustees borrowed $1368 from the New York Baptist Theological Seminary. Finding difficulty in repaying it they asked that it be donated. This could not be done unconditionally because the money had been left the Seminary by a Mr. Withington to found a scholarship and were it directed to any other object "the heirs of Brother Withington would have a legal claim upon it." The sum, however, with accrued interest amounting in all to $1573.20 was by resolution of the Seminary Board "subscribed for the purpose of aiding the trustees of the College in liquidating their present debt" provided the trustees "receive the aforesaid sum of $1573.20 for the purpose of endowing a scholarship in the said college to be named The Withington Scholarship." The word "scholarship" was frequently used loosely as synonymous with

free tuition; and the College was giving free tuition. The Trustees put on their records a formal acceptance of the subscription thus made to their needs, and the affair became a thing of the past. In 1910 it was revived by the Attorney General's report which stated "No attempt has been made to fund this scholarship. The money originally borrowed had been expended, and at the time the scholarship was founded the College was largely in debt without means of liquidating the same except its grounds and college buildings on what was known as College Hill or Mount Pleasant."

It was only spasmodically that the University thus fell from grace. Its career in general—first as Columbian College, then as Columbian University, and now as George Washington University—has been one of faithful, continuous service; and its successive generations of ill paid workers deserve honor. Culpability, largely the result of circumstances, has come through carelessness and bad judgment not intention. The $1368 borrowed in 1822 of the New York Baptist Theological Seminary, was, so the Seminary Board declared, "borrowed by Mr. Rice as agent of the College upon a mortgage on real estate in Washington and . . . lost because that mortgage was not recorded according to promise." Luther Rice who thus borrowed the money and failed to secure it according to promise was an earnest missionary of the Baptist Church, conscientious and tireless in his devotion to the College of which he was really the founder. Everything he had at the time of his death he gave to the College. "Send my sulky and horse and baggage to Brother Brooke with directions to send them to Brother Sherwood, and say that all belong to the College." He and other accumulators of trouble after him were impelled by a generous hunger for service and a laudable ambition for success; but their methods, philanthropic and enthusiastic, were too often careless and speculative rather than business-like.

The crash of 1910 while threatening destruction brought good. For one thing it caused the bookkeeping of the University to be greatly improved. The Attorney General's report made at Government expense—at such expense as would have been

prohibitive to the University—provided a rock bottom basis on which to build. In that report all the irregularities of the past were curried out, swept up, and brought together. Now they have all been straightened on the University books. The books formerly kept in primitive fashion on a cash basis merely are now kept in accordance with the best modern thought and might well serve as models for any institution. The auditing formerly done by a committee of the Trustees or by some one individual is now done quarterly by an auditing company. The Treasurer's report formerly a private affair made only to the Board of Trustees is now given all publicity. Moreover the crash put a natural period to the policy of expansion which had been prevailing, and substituted for it one of determination to make ends meet.

Under the present administration the financial credit of the University has passed from bad to good. At the close of the fiscal year 1910 the University owed $538,020.41 and was charged in the Attorney General's report with having impaired its endowment to the extent of $369,405.98. It had nothing with which to pay except real estate. Its general indebtedness was met chiefly through the sale of the two buildings occupied respectively by the Department of Arts and Sciences and the Law School; the reestablishment of the impaired endowment was fully assured by a deed of trust on the Medical School and Hospital property, valued at $403,599.93. That deed of trust remains in force; but now the only outside standing indebtedness is $33,712.50, the residue of a mortgage indebtedness of $55,000.00 placed on property bought since 1912. The assets of the University based on a new and conservative valuation are $641,604.45. Before 1910–11 the current expenses had for years regularly exceeded the income available. In 1910–11 the income was made to exceed the expenses by $5812.97; and since then each year has seen a larger net income. In 1914–15, it was $26,292.25.

The increased income is due to an increased number of students and represents not only financial gain but greater usefulness. The growth of registration is shown in the following table:

	1910-11		1915-16	
School of Graduate Studies	54		115	
Columbian College (281)	358		699	
(College of Political Sciences, 77)				
College of Engineering	176		231	
Teachers College	93	681	152	1194*
Medical School	98		149	
Dental School	40		126	
Law School	343	481	424	699
National College of Pharmacy	63		48	
College of Veterinary Medicine	65	128	65	113
		1290		2006
Duplicates		13		33
Totals		1277		1973

* 3 duplicates.

The University has not lessened the scope of its instruction. It has a graduate school, three undergraduate colleges—Academic, Engineering, and Teachers—schools in Medicine, Dentistry, and Law, and affiliated with it colleges of Pharmacy and of Veterinary Medicine. In 1913 the School of Political Sciences was discontinued but this did not necessitate the discontinuance of the work done by it. Before then, Columbian College, the School of Political Sciences, and Teachers College, all three alike undergraduate colleges conferring the same degree of Bachelor of Arts with identical requirements for admission and very similar requirements for graduation together with the School of Graduate Studies and the College of Engineering with their more distinctive requirements for admission and graduation, were treated administratively as if they were entities as separate one from another as the Law School is from the Medical School. Since they shared in common the same buildings, the same corps of instructors and in most instances the same courses of instruction, their interests were continually overlapping with inevitable confusion. The amalgamation of the School of Political Sciences with Columbian College and the subordination of all to the Faculty of Arts and

Sciences was merely a simplification of administration, rendering the service more effective.

The quality of instruction has improved. This is most easily demonstrable in the professional schools; for graduates of those schools are subjected to official examination before they can be admitted to practise their professions. Statistics compiled by the American Medical Association show the average percentage of failure among graduates of the Medical School from 1910 to 1914 to have been 6.2 whereas from 1906 to 1910 it had been 20.4. In 1913 the percentage of failure was 3.2 and only two schools in the United States had a better record. In 1914, there were no failures. Law associations do not publish such detailed statistics; but there is sufficient to prove the work done by the Law School of late markedly good. In the District of Columbia the general percentage of failure in Bar examinations has run as high as 50 per cent; in 1915 it was 40 per cent. The percentage of failure among graduates of the Law School cannot in recent years have exceeded 5 per cent; in 1915—when pains were taken to ascertain the number (twenty-five) offering themselves for examination—it was 0. Unfortunately, the quality of work done under the Faculty of Arts and Sciences cannot be tested by outside examination. For that reason it is more subject to question. Were it open to test, there is every reason to believe that it would repeat in distinguished fashion the stories of the professional schools. Of course, as everywhere some subjects are dealt with more effectively than others; but throughout the University the ideal of quality has supplanted that of quantity.

Need for the service has grown with the growth of the country and its capital city. Roughly three-quarters of the students registered in the University are self-supportive, and by far the greater number of these are in government employ. Confined by their employment to Washington such students are rendered incapable of migration. Some might under compulsion enter a sectarian institution of the District; but many are necessarily dependent wholly on George Washington University. For them it is that or nothing. This is peculiarly true of the women; for there is no undergraduate work avail-

able to women short of Baltimore. In Columbian College and Teachers College combined, about one-half of the students are women; and of these again about one-half are employed. Of the unemployed, a goodly proportion are confined to the city for study by the financial circumstances of their parents.

The nature and the extent of employment held by students is indicated by the following table taken from the last report of the Dean of the Law School to the President of the University. The classification is of students registered in the Law School during the academic year 1914–15.

No Employment reported	68
Governmental Employment:	
Agricultural Department	13
Army Officers	3
Army War College	3
Bureau of Engraving	1
Congressional Library	13
Diplomatic Corps	1
D. C. Government Courts	1
D. C. Executive Departments	10
General Land Office	3
Geological Survey	3
Government Printing Office	1
Hygiene Laboratory	2
Indian Office	3
Interior Department	3
Interstate Commerce Com.	9
Department of Justice	3
Department of Labor	4
National Museum	1
Naval and Marine Corps Officers	8
U. S. Navy	1
Navy Department	6
Navy Yard	2
Patent Office, clerks	1
Patent Offices, examiners	62
Pension Office	1
Post Office	12
Public School Teachers	2
Reclamation Service	3
State Department	1
Treasury Department	9
War Department	13
Census Bureau	1
Civil Service Commission	2
Coast and Geodetic Survey	1
Commerce	14
Congressional Clerks, Secretaries, etc	43
Weather Bureau	3
White House	2
Department not given	1
Private Employment:	
Assistant Librarians	3
Ship's Architect	1
Bank clerks	4
Bookkeepers	2
Builders	1
Cashiers	1
Clerk, Carnegie Institution	1
Hotel or Club clerks	2
Div. Supt. Telephone Co.	1
Insurance Agents	1
Lawyers	5
In Lawyer's offices	7
Newspaper work	7
Patent Lawyers	10
With Patent Lawyers	10
Night Mgr., Telegraph Dept. So. Rwy	1
Clerk, So. Rwy	1
Real Estate	3
Salesmen	3
Secy-Treas., Arcade Co.	1
Private School Teachers	4
Telegraph operators	1

expansion. The glamor of the location in the capital of the United States has at times blinded authorities of the University to the peculiarities of the city. Mistaken action has come from enthusiastic perception of real advantages unaccompanied by sane appreciation of existing facts.

What makes any business is its clientage; and what makes an institution of learning—more even than the teaching force, far more than bricks and mortar—is the student body. Owing to the location of the University many of its students are picked men and women, Government clerks, drawn by law from all parts of the country, most of whom have passed civil service examinations. They are mature, earnest students who come to the University for instruction of which they feel the need and who pay for that instruction with money they themselves have earned. They form a nucleus of a student body manifestly different from that of the typical college. They have no time for athletics—very little for anything outside of their chosen work, which naturally tends to be vocational. Their time is so limited and so variously limited that it is impossible to put them through the requirements for a degree in classes. Each takes what work he can. Of the students registered in Columbian College and Teachers College 40 per cent are taking less than six of the fifteen hours a week necessary for graduation in four years. They register as special students, or if candidates for a degree they take more than four years in getting it. To serve them, the University is obliged to repeat morning instruction in the late afternoons, and to depart in many details from the beaten track.

Any effort to keep the conventional ways of the typical college at the expense of the government clerk is a dereliction of duty; for the University is preeminently an urban institution and owes its first service to the community. Such dereliction brings immediate punishment in loss of students and consequent loss of tuition fees. Hitherto it has been largely on tuition fees that the University has been run; but that an institution of higher learning cannot be run effectively and permanently as a paying business is a truism. At present the University is enabled through good fortune and peculiar local

conditions to maintain a high standard of work at a minimum cost. It is beyond reason to hope that this standard can be maintained indefinitely on like cost.

The greatest difficulty arising from the peculiarities of the location and consequent personnel of the student body is financial. The alumni are not rich; more, they are not bound together in class organization; nor are they filled with the enthusiasms of the athletic field. Loyalty to the University exists in the individual but not collectively. It therefore cannot be utilized effectively for commercial purposes. Moreover, the abiding portion of the community is not rich. Government civil service offers great attractions but not wealth; and the higher paid officials seldom become permanent residents. Each represents some other part of the country and his real interest lies there. Washington belongs to everybody; and it is proverbial that what belongs to everybody belongs to nobody. Hence it is difficult to make civic pride effective. The resource must be to national pride. This means to Congress; and Congress does not help the privately endowed institution.

If however the location by differentiating the University gives rise to difficulty, it also excites interest. The hope seems reasonable that this interest will bear fruit, and that before many years pass, the University will be put into a position of having. Then having it shall receive. An institution of the assured life and importance which must fall to a well equipped university in the capital of the country is big with promise. Its possibilities set ambition aflame with kindling imagination. What better or more lasting memorial could a man erect for himself or others than a stone in such a light-giving pillar of ever increasing grandeur!

Rich or poor the University must exist. The necessity for it has already been noted. It is the only non-sectarian institution of higher learning in a locality largely populated by students of exceptional ability who are confined to the locality by their duties. Immediately after the crash of 1910 when the University took up its life with damaged reputation in hired quarters, 1277 students registered. This may logically be considered the minimum of insistent demand—a minimum which

George Washington University Bulletin

REPORT OF THE TREASURER

for the year ended August 31, 1916

Volume XV, Number 3,
October, 1916

PUBLISHED FOUR TIMES A YEAR; IN MARCH, JUNE, OCTOBER AND DECEMBER

Entered October 6, 1904, at Washington, D. C., as second class matter under Act of Congress of July 16, 1894.

Report of the Treasurer

OCTOBER 11, 1916.

THE BOARD OF TRUSTEES OF GEORGE WASHINGTON UNIVERSITY:

GENTLEMEN: I have the honor to submit herewith a report showing in detail the financial operations of the University for the fiscal year ended August 31, 1916, and exhibiting the condition of Trust Funds as required by the By-Laws of the University, Article XI, Section 1, certified by The American Audit Company of New York.

Endowments were received during the year as follows: Alumni Professorship of Mathematics Fund $746.09; Theodore J. Mayer bequest $4,078.95; Total $4,825.04. Trust Funds show a total, after rearrangement, of $481,621.98.

The plant of the University was increased by the purchase of 2017 G Street and adjoining land. The building was remodeled, and an annex constructed in the rear, providing four large class rooms and several offices for teachers. The real estate used for educational purposes shows a book value of $489,982.75.

Equipment costing $4,278.64 and library books costing $2,519.68 were added. After writing off 5% for depreciation the book value of equipment is $91,409.93 and the book value of library books is $41,970.22.

Payments on the mortgage debt were made as follows:

On 2023 G Street	$4,500.00
On 1016 13th Street	500.00
On 1300 L Street	300.00
Total	$5,300.00

The mortgage debt at the close of 1915–16 stood as follows:

2023 G Street	$15,000.00
2017 G Street	6,500.00
1016 13th Street	5,500.00
1300 L Street	4,162.50
Total	$31,162.50

Contributions were received during the year and applied as follows:

Prizes	$75.00
Maintenance	5,925.00
Buildings and Grounds	3,676.27
Furniture	40.00
Restoration of Cutter Fund income	75.14
Geology laboratory	74.01
Total	$9,865.42

Student income showed the same ratio to operating expenses as last year (104%) except for the fact that a depreciation of $7,020.01 was written off on equipment and library books and charged to expense. Including this unusual charge the ratio stood at 99+%.

The Law School Building Fund, authorized by the Board of Trustees May 31, 1916, amounts on this date to $295.00. The amount of all trust funds, including this fund, now available for the Law School site and building, in cash and securities, is $20,537.73. Additional pledges towards the Law School Building Fund are in hand, payable in from one to three years, of $7,180.00.

Much renovating and repairing was done during the year to aid in sustaining the standard set for buildings and equipment, the notable changes being new library tables and chairs for the library; regrading and laying out of the ground back of the college buildings; overhauling of the main building roof; painting class rooms; new smoke stack for the mechanical engineering boiler room; etc.

Very respectfully yours,

CHARLES W. HOLMES,
Treasurer.

Report of The American Audit Company

OCTOBER 5, 1916

We have examined the accounts and records of the GEORGE WASHINGTON UNIVERSITY for the year ended August 31, 1916, and submit our report including Exhibits and Schedules as follows:

EXHIBIT "A"—BALANCE SHEET,
As at August 31, 1916.

"B"—GENERAL SURPLUS,
As at August 31, 1916.

"C"—MEDICAL SCHOOL SURPLUS,
As at August 31, 1916.

"D"—LAW SCHOOL SURPLUS,
As at August 31, 1916.

"E"—REVENUE ACCOUNT,
For the year ended August 31, 1916.

"F"—DEPARTMENT OF ARTS AND SCIENCES,
For the year ended August 31, 1916.

"G"—DEPARTMENT OF ARTS AND SCIENCES SUMMER SCHOOL,
For the year ended August 31, 1916.

"H"—LAW SCHOOL,
For the year ended August 31, 1916.

"I"—LAW SUMMER SCHOOL,
For the year ended August 31, 1916.

"J"—MEDICAL AND DENTAL SCHOOLS,
For the year ended August 31, 1916.

"K"—UNIVERSITY HOSPITAL,
For the year ended August 31, 1916.

"L"—STATEMENT OF CASH RECEIPTS AND PAYMENTS,
For the year ended August 31, 1916.

"M"—TRUST FUNDS,
As at August 31, 1916.

"N"—ENDOWMENT FUNDS INVESTMENTS,
As at August 31, 1916.

"O"—EXECUTORY TRUST FUNDS INVESTMENTS,
As at August 31, 1916.

"P"—ENDOWMENT AND EXECUTORY TRUST FUNDS, INCOME AND EXPENSE,
For the year ended August 31, 1916.

CASH: $25,330.64.

We counted the cash on hand September 12, 1916, and reconciled the Cash Account with bank pass books as at August 31, 1916, finding cash in accordance with the balance shown by the books and deposits in banks, as per bank pass books.

ACCOUNTS RECEIVABLE: $8,111.55.

This amount consists of fees, etc. due for the term 1915–1916, from students in the various departments and other accounts receivable as follows:

School of Graduate Studies	$137.75	
Columbian College	1,524.68	
College of Engineering	522.09	
Teachers College	23.25	
Summer School	298.11	
	2,505.88	
Less Unadjusted Difference	79.31	
Total Department of Arts and Sciences		$2,426.57
Law School		646.50
Medical School	1,389.52	
Dental School	745.25	
		2,134.77
Accounts due University Hospital from patients for the year 1915–1916		820.70
Income from Endowments, available but not transferred to University account, as at August 31, 1916		2,083.01
		$8,111.55

The balances standing in accounts due at September 1, 1915 remaining unpaid at August 31, 1916, are considered worthless and were charged against the respective Surplus Accounts.

DEPRECIATION:

Depreciation on the Library books, University Equipment and Hospital Equipment was charged off to the amount of $7,020.01.

NET INCOME:

The Net Income for the year from all departments exclusive of the University Hospital, was $24,630.20, as shown by Exhibit "E."

GENERAL SURPLUS: $248,167.00.

The changes in this account since August 31, 1915 are shown by Exhibit "B."

MEDICAL SCHOOL SURPLUS: $16,948.91.

This account includes the surplus of the University Hospital and Medical and Dental Schools at August 31, 1916, as shown by Exhibit "C."

LAW SCHOOL SURPLUS: $6,818.26.

This account represents the Law School Surplus as at August 31, 1916, as shown by Exhibit "D."

TRUST FUNDS:

On October 4, we inspected the securities representing the Investments of the Endowment and Executory Trust Funds, in stocks, bonds and notes, as per Exhibits "N" and "O."

We verified the cash balances as at August 31, 1916 representing uninvested principal $11,428.16 and unexpended income $9,009.80 of the Endowment and Executory Trust Funds with the bank pass books.

The classification of the Trust Funds in Exhibit "M," is tentative and subject to the action of the Board of Trustees as provided in resolution of the Board of Trustees adopted May 31, 1916.

Respectfully submitted,

THE AMERICAN AUDIT COMPANY,

By C. R. CRANMER,

(Seal) *Resident Manager.*

Approved:

HARRY M. RICE, *Vice-President.*

Attest:

A. F. LAFRENTZ, *Secretary.*

GENERAL ACCOUNTS

EXHIBIT "A".
BALANCE SHEET.
As at August 31, 1916.

Assets

Cash:		
In Bank	$25,330.64	
Petty Cash Funds	1,125.00	
		$26,455.64
Accounts Receivable:		
Students' Ledger 1915–1916	5,207.84	
Hospital Accounts 1915–1916	820.70	
Endowment Income Receivable	2,083.01	
		8,111.55
Insurance:		
Withdrawal value of Perpetual Insurance Policies		1,406.25
Libraries-Books:		
Arts and Sciences	24,964.84	
Law School	15,156.78	
Medical School	4,057.56	
	44,179.18	
Less Depreciation	2,208.96	
		41,970.22
Equipment:		
Arts and Sciences	40,379.26	
Law School	3,217.51	
Medical School	29,303.41	
University Hospital	23,320.80	
	96,220.98	
Less Depreciation	4,811.05	
		91,409.93
Real Estate:		
Medical and Hospital Lands and Buildings, 1335, 1339 and 1341 H. St., N.W	403,599.93	
2017 G St., N. W.	18,218.03	
2023 G St., N. W., including 3 lots adjoining and Engineering Laboratory Building	40,000.00	
2025 G St., N. W.	8,164.79	
1016 13th St., N. W.	12,000.00	
1300 L St., N. W.	8,000.00	
		489,982.75
		$659,336.34

Liabilities.

Trust Notes:		
Notes secured by Deeds of Trust on:		
2017 G Street, N. W.	$6,500.00	
2023 G Street, N. W.	15,000.00	
1016 13th Street, N. W.	5,500.00	
1300 L Street, N. W.	4,162.50	
		$31,162.50
Interest Payable:		310.86
Liability to Endowment Funds:		
Secured by Deed of Trust, dated December 1, 1910, on Medical and Hospital Lands and Buildings, 1335, 1339 and 1341 H Street, N. W.		323,430.23
Liability of the University General Property:		
To Denman Fund	8,179.32	
To Specific Endowment Funds Income which was applied to current expenses prior to August 31, 1910	24,319.26	
		32,498.58
Surplus:		
General Exhibit "B"	248,167.00	
Medical Exhibit "C"	16,948.91	
Law Exhibit "D"	6,818.26	
		271,934.17
		$659,336.34

Trust Funds Investments:		
Endowment Funds Exhibit "N"	445,875.75	
Executory Funds Exhibit "O"	24,318.07	
		470,193.82
Cash on Hand, for Investment, August 31, 1916:		
Endowment Funds	4,100.64	
Executory Funds	7,327.52	
		11,428.16
		$481,621.98

Trust Funds Exhibit "M":		
Endowment Funds	449,976.39	
Executory Funds	31,645.59	
		$481,621.98
		$481,621.98

NOTE:

Surplus General Property	$271,934.17
Trust Funds	481,621.98
Unexpended Trust Funds Income Exhibit "P"	9,009.80
Total Net Resources	$762,565.65

EXHIBIT "B."

GENERAL SURPLUS.

As at August 31, 1916.

Balance, as at September 1, 1915		$226,300.68
Add:		
Contributions to Fifty Thousand Dollar Building and Grounds Fund		16,284.00
Contributions to Engineering Laboratory Building Fund		2,950.00
Contribution for rehabilitation of Davis Scholarship Fund		40.00
Contribution to restore income of Cutter Prize Fund		75.14
Old Accounts Collected: Prior to current year		152.37
Net Income of University for the year ended August 31, 1916, transferred from Revenue Account, Exhibit "E"		24,630.20
		$270,432.39
Less:		
Fees, 1914–1915	158.48	
Uncollectible Accounts 1914–1915	938.81	
Denman Law School Fund $8,179.32		
Kendall Endowment Fund 5,959.61		
	14,138.93	
in accordance with resolution of Board of Trustees May 31, 1916		
Net Income Medical and Dental Schools for the year ended August 31, 1916, transferred to Medical School Surplus Exhibit "C"	1,750.50	
Net Income Law School for the year ended August 31, 1916, transferred to Law School Surplus Exhibit "D"	5,278.67	
		22,265.39
Balance August 31, 1916		$248,167.00

NOTE BY TREASURER:

Balance August 31, 1916		$248,167.00
Invested in Real Estate, Equipment etc.	$231,076.71	
Students' Accounts Uncollected	2,426.57	
	$233,503.28	
Available Cash balance August 31, 1916		14,663.72

EXHIBIT "C".

MEDICAL SCHOOL SURPLUS

As at August 31, 1916.

Balance, as at September 1, 1915		$17,009.52
Add:		
Donation from Board of Lady Managers for payment on Trust Notes, Nurses Home		500.00
Net Income Medical and Dental Schools for the year ended August 31, 1916, Exhibit "J"		1,750.50
		19,260.02
Less:		
Uncollectible Accounts:		
Medical and Dental Schools 1914–1915 .. $575.54		
Hospital 1914–1915 ..... 1,110.04		
	$1,685.58	
Fees Medical and Dental Schools 1914–1915	298.39	
Honorarium to Dr. Boyd R. Read	100.00	
Net Loss University Hospital for year ended August 31, 1916, Exhibit "K"	227.14	
		2,311.11
Balance August 31, 1916		$16,948.91

NOTE BY TREASURER:

Balance August 31, 1916		$16,948.91
Invested in Real Estate, Equipment etc.	$7,783.12	
Students and Hospital Accounts Uncollected	2,955.47	
		$10,738.59
Available Cash balance August 31, 1916		$6,210.32

EXHIBIT "D".

LAW SCHOOL SURPLUS.

As at August 31, 1916.

Balance as at September 1, 1915		$9,428.98
Add:		
Net Income Law School for year ended August 31, 1916 Exhibit "H"		5,278.67
		$14,707.65
Less:		
Transferred to Law School Fund	$7,687.39	
Uncollectible Accounts 1914–1915	156.50	
Fees 1914–1915	45.50	
		7,889.39
Balance August 31, 1916		$6,818.26

NOTE BY TREASURER:

Balance August 31, 1916		$6,818.26
Invested in Equipment, etc.	$1,715.16	
Students Accounts Uncollected	646.50	
		2,361.66
Available Cash balance August 31, 1916		$4,456.60

EXHIBIT "E".

REVENUE ACCOUNT.

For the year ended August 31, 1916.

Expenses.			*Income.*		
Administration Expenses:			Department of Arts and Sciences:		
Salaries, Clerk Hire, etc.	$13,504.34		Exhibit "F"		$14,765.20
Stationery and Printing	1,003.07		Law School:		
Telephone	371.76		Exhibit "H"		5,278.67
Advertising	597.00		Medical and Dental Schools:		
Postage	588.43		Exhibit "J"		1,750.50
Auditing	500.00		Contributions:		
Commencement Expenses	1,621,62		Maintenance Fund 1912–1916	$5,850.00	
Miscellaneous	894.36		General Expense 1910–1912 Fund	75.00	
		$19,080.58	For Purchase of Furniture for 2017 G Street, N. W.	40.00	
Interest on Trust Notes		$1,110.72	For Geological Laboratory	74.01	
Net Income for year ended August 31, 1916 transferred to Surplus Account, Exhibit "B"		$24,630.20	General Expenses from:		
			Dept. of Arts & Sciences... $5,000.00		
			Law School 3,500.00		
			Dental School 1,000.00		
			University Hospital 1,500.00		
				11,000.00	17,039.01
			Income from Investments:		
			Endowments for General Purposes Exhibit "P"		1,683.01
			Income from Other Sources:		
			Graduation Fees	2,666.00	
			Bonding Fees	63.00	
			Interest	821.07	
			Matriculation Fees National School of Pharmacy	55.00	
			Matriculation Fees Veterinary School.	235.00	
			From Powell Fund, account of salary of G. W. Littlehales	400.00	
			Miscellaneous	65.04	
					4,305.11
		$44,821.50			$44,821.50

EXHIBIT "F".

DEPARTMENT OF ARTS AND SCIENCES.

For the year ended August 31, 1916.

Income.

Tuition:		
School of Graduate Studies	$8,800.24	
Columbian College	44,376.90	
College of Engineering	16,487.50	
Teachers College	7,470.62	
		$77,135.26
Matriculation:		
School of Graduate Studies	150.00	
Columbian College	1,760.00	
College of Engineering	490.00	
Teachers College	290.00	
		2,690.00
Laboratory:		
School of Graduate Studies	154.50	
Columbian College	3,295.57	
College of Engineering	614.78	
Teachers College	166.25	
		4,231.10
Library:		
School of Graduate Studies	195.00	
Columbian College	1,277.00	
College of Engineering	446.00	
Teachers College	292.00	
		2,210.00
Miscellaneous:		
Contribution for Chi Omega Prizes	15.00	
Contribution for English (Sigma Kappa Prize)	10.00	
Columbian College	101.25	
Rent Fraternity Rooms	449.00	
Instruction given Veterinary Students in Arts and Sciences Chemical Laboratory	217.20	
		792.45
Forward,		87,058.81

Forward,			$87,058.81
Expenses.			
Chi Omega Prizes	$15.00		
English (Sigma Kappa Prize)	10.00		
Salaries	52,344.38		
Laboratory	2,917.23		
Library	108.19		
Stationery and Printing	986.32		
Postage	96.29		
Depreciation on Equipment	2,018.96		
Depreciation on Library Books	1,248.24		
Miscellaneous	83.44		
		59,828.05	
University Hall:			
Wages	2,225.00		
Rent	900.00		
Heat and Light	1,772.00		
Hauling	121.00		
Repairs	2,589.39		
Supplies and Expense	1,179.16		
		8,786.55	
		68,614.60	
Transferred to General Funds		5,000.00	
			73,614.60
			13,444.21
Net Income Department of Arts and Sciences Summer School transferred from Exhibit "G"			1,320.99
Net Income transferred to Revenue Account Exhibit "E"			$14,765.20

NOTE:

Library books were purchased during the year to the amount of $964.84.

NOTE:

Tuition was rendered by the Department of Arts and Sciences for which it received no monetary consideration as follows:

Scholarships	$4,901.26	
University Aid	1,375.63	
Ministerial Aid	339.40	
		$6,616.29

EXHIBIT "G".

DEPARTMENT OF ARTS AND SCIENCES

SUMMER SCHOOL.

For the Year ended August 31, 1916.

Income.

Tuition	$3,715.50	
Laboratories	322.17	
		4,037.67

Expenses.

Salaries	$2,597.30	
Stationery and Printing	104.50	
Advertising	2.50	
Laboratories	12.38	
		2,716.68
Net Income transferred to Department of Arts and Sciences, Exhibit "F"		$1,320.99

EXHIBIT "H".

LAW SCHOOL.

For the year ended August 31, 1916.

Income.

Tuition		$36.000,00	
Matriculation		780.00	
Reinstatement Fees		30.00	
Library		1,215.00	
Contribution for Ellsworth Prize		25.00	
Contribution for Phi Delta Phi Prize 1914-1915		25.00	
			$38,075.00

Expenses.

Salaries	$23,633.83		
Library	23.40		
Stationery and Printing	609.02		
Telephone	183.22		
Postage	167.25		
Advertising	499.59		
Ellsworth Prize	25.00		
Depreciation on Equipment	160.88		
Depreciation on Library Books	757.84		
Miscellaneous	56.31		
		26,116.34	
Law Hall:			
Wages	350.00		
Rent	2,500.00		
Light	194.14		
Repairs to Equipment	107.28		
Supplies and Expense	89.43		
		3,240.85	
Transferred to General Funds		3,500.00	
			32,857.19
			5,217.81
Net Income, Law Summer School transferred from Exhibit "I"			60.86
Net Income transferred to Revenue Account Exhibit "E"			$5,278.67

NOTE:

Library books were purchased during the year to the amount of $1,247.28.

EXHIBIT "I".

LAW SUMMER SCHOOL.

For the year ended August 31, 1916.

Income.

Tuition		$1,112.50

Expenses.

Salaries	$952.14	
Stationery and Printing	29.00	
Advertising	70.50	
		1,051.64
Net Income transferred to Law School Exhibit "H"		$60.86

EXHIBIT "J".

MEDICAL AND DENTAL SCHOOLS.

For the year ended August 31, 1916.

Income.

Medical School:		
Tuition	$20,752.15	
Matriculation	170.00	
Laboratory	756.47	
Library	411.00	
Rent of Microscopes	503.00	
Rent of Hall	64.00	
Miscellaneous	312.11	
		$22,968.73
Dental School:		
Tuition	12,762.53	
Matriculation	345.00	
Laboratory	441.32	
Library	224.00	
Rent of Microscopes	382.50	
Infirmary	1,956.26	
		16,111.61
		39,080.34

Expenses.

Salaries	$21,472.50	
Laboratory	2,839.65	
Infirmary	1,556.25	
Library	13.11	
Advertising	119.71	
Stationery and Printing	603.82	
Telephone	212.05	
Postage	107.50	
Depreciation on Equipment	1,465.17	
Depreciation on Library Books	202.88	
Miscellaneous	351.21	
		28,943.85
Medical Hall:		
Wages	1,707.50	
Heat and Light	2,356.26	
Hauling	166.00	
Repairs	2,272.96	
Supplies and Expense	883.27	
		7,385.99
Transferred to General Funds from Dental School		1,000.00
		37,329.84
Net Income Medical and Dental Schools transferred to Revenue Account Exhibit "E"		1,750.50

NOTE:
Library books were purchased during the year to the amount of $307.56.

NOTE:
Tuition to the amount of $300.00 was rendered by the Medical School for which it received no monetary consideration.

EXHIBIT "K".

UNIVERSITY HOSPITAL.

For the year ended August 31, 1916.

Income.

Pay Patients:		
Collected	$51,109.33	
Uncollected	820.70	
		$51.930,03

Expenses.

Salaries	$14,409.51	
Table Supplies	15,427.35	
Medical and Surgical Supplies	5,781.16	
Electricity and Gas	2,474.77	
Fuel	1,666.35	
Laundry	1,496.67	
Repairs	3,038.51	
Miscellaneous Supplies	1,710.29	
Ice	875.91	
Telephone	534.13	
Stationery and Printing	523.86	
Insurance	183.50	
Interest	600.00	
Hauling	133.00	
Lectures	50.00	
Depreciation on Equipment	1,166.04	
Miscellaneous	586.12	
	50,657.17	
Transferred to General Funds	1,500.00	
		52,157.17
Net Loss transferred to Medical School Surplus Exhibit "C"		$227.14

EXHIBIT "L".

STATEMENT OF CASH RECEIPTS AND PAYMENTS.

For the year ended August 31, 1916.

Receipts.

Receipts from Students:		
Department of Graduate Studies	$9,100.00	
Columbian College	51,136.87	
Department of Engineering	17,702.35	
Department of Teachers College	8,037.62	
Law School	37,470.25	
Medical School	21,217.97	
Dental School	14,071.46	
Graduation Fees	2,266.00	
Summer School:		
Arts and Sciences Department	3,818.55	
Law School	1,072.50	
		$165,893.57
University Hospital		51,141.41
Dental Infirmary		1,956.26
Contributions:		
General Expenses 1912–1916	5,850.00	
General Expenses 1910–1912	75.00	
Fifty Thousand Dollar Building and Ground Fund	2,500.00	
		8,425.00
Students' Fees, 1914–1915		3,431.60
Old Hospital Accounts Collected		397.67
Rent of Fraternity Rooms		449.00
Rent of Hall 1325 H Street, N. W.		64.00
Forward,		$231,758.51

Payments.

Expenses:		
Department of Arts and Sciences	$56,537.45	
Law School	25,224.73	
Medical School	21,361.50	
Dental School	4,414.34	
Summer School:		
Arts and Sciences Department	2,716.68	
Law School	1,051.64	
		$111,306.34
University Hospital		49,492.38
Dental Infirmary		1,556.25
Refunds to Students		3,114.57
Maintenance of Buildings:		
University Buildings	8,787.16	
Law Hall	3,244.35	
Medical Hall	7,330.43	
		19,361.94
General Expense		15,147.52
Stationery and Printing		1,003.07
Advertising		597.00
Postage		599.91
Interest		1,064.61
Commencement Expenses		1,631.37
Equipment Law School		32.94
Equipment Medical School		427.14
Equipment University Hospital		1,072.29
Forward,		$206,407.33

Forward,		$231,758.51
Donations:		
Geological Department, for Laboratory	74.01	
For Purchase of Furniture for 2017 G Street, N. W.	40.00	
Board of Lady Managers, to apply on Trust on Nurses Home	500.00	
Student activities	30.00	
Prizes	75.00	
		719.01
National College of Pharmacy-Matriculation Fees		55.00
College of Veterinary Medicine:		
Medical School Instruction	936.00	
Matriculation Fees 1914–1915	105.00	
Matriculation Fees 1915–1916	130.00	
Rent of Microscopes	203.00	
		1,374.00
Transfer of Endowment Income		1,629.27
Special Examinations		140.00
Interest on Bank Balances		809.68
Interest on Notes Receivable		11.39
Refund use of Continental Hall		29.05
Miscellaneous		262.13
Total Receipts		$236,788.04
Cash Balance, September 1, 1915:		
Riggs National Bank	$24,269.71	
Commercial National Bank	927.90	
		25,197.61
		$261,985.65

Forward,		$206,407.33
Equipment Arts and Sciences—General		2,746.27
Arts and Sciences Library, Books		959.84
Law School Library, Books		1,252.28
Medical School Library, Books		307.56
Real Estate 2017 G Street, N. W.		11,820.64
Trust Notes, 2023 G Street, N. W.		4,500.00
Trust Notes, Nurses Home		500.00
Equitable Co-operative Building Association Loan Account		300.00
Law School Surplus-Investment		7,500.00
Law School Surplus-Balance Transferred to Endowment Records		187.39
Law School Petty Cash Fund		25.00
Medical School Surplus-Honorarium to Dr. Boyd R. Read for Services 1914–1915		100.00
Debating Council		18.70
Transfer to Special Account at American Security & Trust Company for Student Activities		30.00
Total Payments		$236,655.01
Cash Balance, August 31, 1916:		
Riggs National Bank	$24,402.74	
Commercial National Bank	927.90	
		25,330.64
		$261,985.65

TRUST ACCOUNTS

EXHIBIT "M."

TRUST FUNDS.

As at August 31, 1916.

GENERAL ENDOWMENT FUNDS

Permanent funds, principal to be invested and income only to be used, for support of the general work of the University or of established professorships therein.

Congressional Professorship Endowment Fund:
Donation by the United States, in 1832, by Act of Congress, of $25,000 in city lots in Washington, D. C., to be sold and the proceeds invested as a capital, the dividends or interest to be used and applied, in aid of other revenues of Columbian College, to the establishment and endowment of such professorships therein "as now are, or hereafter shall be, established by the Trustees;" (appropriated to the extent of $6,295.77 by vote of the Board of Trustees to the support of the Professorship of English). $91,707.70

Poindexter Endowment Fund:
Fund raised by authority of the Trustees of Columbian College by general subscription between the years 1845 and 1851, as a permanent endowment for the support of the College 12,525.56

Forty Thousand Dollar Endowment Fund:
Fund raised by authority of the Trustees of Columbian College between the years 1851 and 1870, for increasing the endowment fund of the College; John Withers of Alexandria, Virginia, giving $16,100, and the balance being obtained by general subscription..... 26,891.46

Corcoran Endowment Fund:
Fund raised by authority of the Trustees of Columbian College and Columbian University between the years 1871 and 1886, to be forever held inalienable, and not to be diminished by use for the support of the institution, but the whole amount to be invested, in the discretion of the Trustees and according to their best judgment, and the interest thereon, or the income therefrom to be used for the current expenses and support of the institution; William W. Corcoran, of Washington, D. C., giving $112,000, and the balance being obtained by general subscription..... 217,864.92

Elton Professorship Fund:
Bequest of Rev. Romeo Elton, of Exeter, England, in 1872, to be applied for the foundation of a professorship of mental and moral philosophy in Columbian College, to be called the Elton Professorship of Mental and Moral Philosophy..... 14,508.19

Syms Endowment Fund:
Bequest of Samuel Robert Syms, of West Hoboken, New Jersey, in 1891, to Columbian University, to be applied by the Trustees towards the endowment of the College proper..... 1,500.00

Alumni Professorship Fund:
Gifts of various alumni since 1911, for the endowment of an Alumni Professorship of Mathematics, the amount to be invested and the interest only to be used for the professorship..... 746.09

$365,743.92

SPECIFIC ENDOWMENT FUNDS

Permanent funds, principal to be invested and income only to be used, for designated purposes specified by the donors consistent with the general work of the University, but not necessarily contributing to its support.

Scholarship Funds:

Walker Scholarship Fund:
Gift of William Walker, of Putnam County, Georgia, in 1824, for the endowment of a scholarship..... 2,500.00

Withington Scholarship Fund:
Gift of the Board of Trustees of the New York Baptist Theological Seminary, on behalf of John Withington of New York, in 1829, for the purpose of endowing a scholarship in Columbian College, to be named the Withington Scholarship..... 1,953.13

Morehouse Scholarship Fund:
Gift of A. Morehouse, of Washington, D. C., in 1861, to Columbian College, with the design of adding to its ability to furnish gratuitous instruction to indigent students for the Christian ministry..... 1,500.00

Kendall Scholarship Fund:
Gift of Amos Kendall, of Washington, D. C., in 1869, to Columbian College on behalf of Calvary Baptist Church in the City of Washington, to purchase a classical scholarship; the Trustees of Public Schools in the City of Washington, and their successors, to have the perpetual privilege of selecting from said schools one pupil annually to fill said scholarship, and the pupil so selected each to be entitled to instruction in said College for the term of six years, free of charge for tuition, use of library, and apparatus, or for any other privilege allowed to paying students of the same grade 5,959.61

Davis Scholarship Fund:
Gift of Isaac Davis, of Worcester, Massachusetts, in 1869, the income to be appropriated to some student pursuing his collegiate course in Columbian College under certain conditions..... 1,000.00

M. M. Carter Scholarship Fund:
Gift of Mrs. Maria M. Carter, of Washington, D. C., in 1871, to Columbian College, to found a scholarship for some deserving young man..... 1,000.00

Farnham Scholarship Fund:
Gift of Mrs. Robert Farnham, of Washington, D. C., in 1871, to Columbian College for a scholarship in the College..... 1000.00

Powell Scholarship Fund:
Devise of real estate by Rear Admiral Levin M. Powell, of Washington, D. C., in 1886, to Columbian University for the free education of young men by way of preparation for entrance into the Naval Academy at Annapolis, or to fit them to become mates and masters in the Marine Service of the United States..... 18,923.00

Mary Lowell Stone Scholarship Fund:
Gift of an anonymous person in memory of Mrs. Mary Lowell Stone, in 1893, to Columbian University for scholarships for needy women students in the Department of Arts and Sciences..... 2,000.00

Forward, 35,835.74

Forward,	$35,835.74
H. H. Carter Scholarship Fund: Gift of Mrs. Maria M. Carter, of Washington, D. C., in 1896, in memory of her husband Henry Harding Carter, to Columbian University, as a foundation for scholarships in civil engineering in Columbian College.....	5,000.00
Nellie Maynard Knapp Scholarship Fund: Gift of the Columbian Women, in 1915, in memory of Mrs. Nellie Maynard Knapp, to George Washington University, for scholarships for women in the Department of Arts and Sciences.....	2,000.00
	$42,835.74

Medical School and Hospital Funds:

Cooper Medical Research Fund: Bequest of Mrs. Eleanor J. Cooper, of Washington, D. C., in 1905, to Columbian University on certain terms since modified by the Supreme Court of D. C. as follows: The income to be devoted towards the establishment and maintenance, in connection with the Medical Department of George Washington University, of a Research Laboratory, the work of this laboratory to be devoted to the investigation of the nature, causation, prevention, and cure of malaria and other infectious and contagious diseases.....	10,000.00
National Park Seminary Hospital Endowment Fund: Gift of students of National Park Seminary, of Forest Glen, Maryland, in 1906, to George Washington University, for the endowment of a bed in the University Hospital.....	500.00
Woodbury Hospital Endowment Fund: Bequest of Miss Ellen deQ. Woodbury, of Washington, D. C., in 1909, to George Washington University, for the reception and treatment of female patients in the hospital belonging to or connected with the University.	9,583.33
Chapman Hospital Endowment Fund: Bequest of Mrs. Susanna A. Chapman, of Washington, D. C., in 1911, to George Washington University, to be used for the purposes of the free wards of its University Hospital.....	1,350.90
Tree Hospital Endowment Fund: Bequest of Lambert M. Tree, of Chicago, Illinois, in 1911, in memory of his mother, Mrs. Laura M. Tree, to Columbian University, for the purpose of establishing one or more beds in perpetuity in the University Hospital to be known as the "Laura M. Tree bed or beds.".....	10,000.00
	$31,434.23

Prize Funds:

Davis Prize Fund:
Gift of Isaac Davis, of Worcester, Massachusetts, in 1847, to Columbian College, for prizes to be awarded annually to such members of the senior class as shall have made the greatest progress in elocution since their connection with the College..... 700.00

Ruggles Prize Fund:
Gift of William Ruggles, of Washington, D. C. (a professor in Columbian College and at one time Acting President), in 1859, to Columbian College, for a prize to be awarded annually for excellence in mathematics.. 500.00

Staughton-Elton Prize Fund:
Gift of Rev. Romeo Elton, of Exeter, England, in 1860 and 1865, to Columbian College, for prizes to be awarded annually for excellence in the Latin and Greek languages; one to be called the Staughton prize in Latin, the other the Elton prize in Greek..... 500.00

Fitch Prize Fund:
Gift of James E. Fitch, of Washington, D. C., in 1883, to Columbian University in memory of Willie E. Fitch, for a gold prize medal to be assigned annually under the auspices of the Scientific School..... 1,000.00

Walsh Prize Fund:
Gift of Thomas F. Walsh, of Washington, D. C., in 1901, to Columbian University, for a gold medal to be awarded annually for excellence in Irish history..... 300.00

Cutter Prize Fund:
Gift of Marion Kendall Cutter, of Washington, D. C., in 1902, to Columbian University in memory of E. K. Cutter, for a prize to be awarded annually for excellence in the study of English..... 1,000.00

Hubbard Prize Fund:
Gift of Mrs. Gertrude M. Hubbard, of Washington, D. C., in 1907, to George Washington University in memory of her husband Gardiner G. Hubbard, for a prize to be awarded annually to the student in the undergraduate department of the University who, having maintained throughout four years a high standing in the classes of American history, may be required to present the best essay upon an assigned topic in this subject..... 1,000.00

Ordronaux Prize Fund:
Bequest of John Ordronaux, of Glen Head, N. Y., in 1909, to George Washington University, for the establishment of biennial prizes in the Law and Medical Departments..... 4,762.50

Sterrett Prize Fund:
Gift of Rev. J. Macbride Sterrett, in 1911, to George Washington University in memory of his son, J. Macbride Sterrett, Jr., for a gold medal to be awarded annually to the student obtaining highest average in physics..... 200.00

$9,962.50

EXECUTORY TRUST FUNDS

Non-permanent funds, principal and income usable for the purposes specified by the donors, each trust terminating on its execution.

Executory Trust Funds not Confined to Building Purposes:

Denman Law School Fund:
Bequest of Hampton Y. Denman, of Washington, D. C., in 1904, to Columbian University, for the use and benefit of the Law Department 8,719.91

Law School Fund:
Amounts set aside by the Trustees of the University since 1911 for the benefit of the Law School 9,799.85

Jacques Law School Fund:
Bequest of Mrs. Mary Emma Jacques, of Washington, D. C., in 1912, to George Washington University, to be used in such manner as the Trustees may direct for the Law School 4,185.30

Jacques Medical School Fund:
Bequest of Mrs. Mary Emma Jacques, of Washington, D. C., in 1912, to George Washington University, to be used in such manner as the Trustees may direct for the Hospital of the University 4,185.31

Mayer Hospital Fund:
Bequest of Theodore J. Mayer, of Washington D. C., in 1907 (received in 1916), to George Washington University, for the benefit of the University Hospital 4,078.95

$30,969.32

Building Funds:

Law School Building Fund:
Gifts of various persons towards a fund authorized by the Trustees of the University May 31, 1916, for purchasing a site and erecting a Law School building 35.00

General Building Fund:
Gifts of various persons towards a fund authorized by the Trustees of the University May 31, 1916, for purchasing sites, buildings and equipment, remodelling or rebuilding, and paying off obligations, (appropriated by the Trustees to the Law School Building Fund until otherwise directed.) 641.27

$676.27

Summary.

General Endowment Funds		$365,743.92
Specific Endowment Funds:		
Scholarship Funds	$42,835.74	
Medical School and Hospital Funds	31,434.23	
Prize Funds	9,962.50	
		84,232.47
Total Endowment Funds		$449,976.39
Executory Trust Funds:		
Funds not confined to building purposes	$30,969.32	
Building Funds	676.27	
		31,645.59
Total Executory Trust Funds		$481,621.98
Total Trust Funds		

EXHIBIT "N."

ENDOWMENT FUNDS INVESTMENTS.

As at August 31, 1916.

STOCKS.	
American Telephone and Telegraph Co.:	
6 shares of stock	$708.00
Washington Sanitary Improvement Co.:	
130 shares of stock	1,300.00
BONDS.	
Chicago, Rock Island and Pacific Railway Co.:	
$24,000 4 per cent. First and Refunding Mortgage Bonds, due 1934	20,959.17
*Chicago, Rock Island and Pacific Railway Co.:	
$10,000 4 per cent. Collateral Trust Bonds, due 2002	8,179.72
Virginian Railway Co.:	
$300 5 per cent First. Mortgage Gold Bonds, Series "A," due 1962	297.38
Washington Railway and Electric Co.:	
$4,500 4 per cent. Consolidated Mortgage Gold Bonds, due 1951	3,631.25
Potomac Electric Power Co.:	
$15,000 5 per cent. Consolidated Mortgage Gold Coupon Bonds, due 1936	15,025.00
Norfolk and Washington Steamboat Co.:	
$200 5 per cent. Coupon Bonds, due 1931	208.00
City of New Brunswick, New Jersey:	
$3,000 4 per cent. Sinking Fund Bonds, due 1922	3,000.00
City of Medford, Massachusetts:	
$3,000 4 per cent. Sewerage Loan Bonds, due 1924	3,000.00
TRUST NOTES.	
Thomas R. Marshall Note:	
Secured by deed of trust on part of lot 5, square 253, and lot 70, block 30, in Columbia Heights; interest 5 per cent.; due May 5, 1919	5,000.00
Washington Sanitary Improvement Co., Notes:	
Secured by deed of trust on Lots in Squares 509, 552, 615, 617 and 674; interest 5 per cent.; due June 9, 1920	16,000.00
Agnes Plunkett Notes:	
Secured by deed of trust on part of lot 12, square 11, in Meridian Hill; interest 5½ per cent.; due February 4, 1917	200.00
Arthur T. Ramsey and Judith L. Steele Notes:	
Secured by deed of trust on lots 21, 22, 23 and part of lot 9, block 32, Columbia Heights; interest 5 per cent.; due March 20, 1920	3,000.00
Interest in $350,000.00 note payable to Washington Loan and Trust Co., Fiscal Agent of George Washington University, Trustee of Endowment Funds, secured by deed of trust, executed by the University to National Savings and Trust Company, Trustee, December 1, 1910, on Medical and Hospital Lands and Buildings, 1335, 1339 and 1341 H Street, N. W.; without interest; due on or before December 1, 1920	323,430.23
Forward,	403,938.75

*On these bonds the University has received and now holds 100 shares of Chicago, Rock Island and Pacific Railway Co., stock.

Forward,		403,938.75
REAL ESTATE.		
Congressional Endowment:		
Lot 8, square 13	$2,565.00	
Lot 10, square 13	2,218.00	
Lot 12, square 13	4,588.00	
Lot 13, square 13	3,924.00	
Lot 9, square 16	2,224.00	
Lot 8, square 23	3,055.00	
Lot 2, square west of 23	1,069.00	
Lot 5, square 87	1,896.00	
		21,539.00
Powell Endowment: 1707 I Street, N. W.		18,923.00
Chapman Endowment: Hyattsville		125.00
Corcoran Endowment: Sub-lot 148, square 672		1,350.00
		$445,875.75

Summary.

Stocks		2,008.00
Bonds		54,300.52
Trust Notes		347,630.23
Real Estate		41,937.00
		$445,875.75
Cash on hand, for Investment, August 31, 1916, Exhibit "A"		4,100.64
Total Endowment Funds Exhibit "M"		$449,976.39

EXHIBIT "O."

EXECUTORY TRUST FUNDS INVESTMENTS.

As at August 31, 1916.

Denman Law School Fund:		
Interest in General Property of the University....		$8,179.32
Law School Fund:		
Potomac Electric Power Co.:		
$2,000 5 per cent. Consolidated Mortgage Gold Coupon Bonds, due 1936	2,028.75	
Rita Weller Notes:		
Secured by deed of trust on Lots 16 to 34 and 36 to 44, square 849; interest 5 per cent.; due October 25, 1918	5,000.00	
Franklin T. Sanner and Wm. A. Hill Note:		
Secured by deed of trust on part Lots 43 and 44, square 158; interest 5 per cent.; due June 18, 1918.....	2,500.00	
		9,528.75
Jacques Fund:		
Metropolitan Railroad Co.:		
$1,000 5 per cent. First Mortgage Gold Bond, due 1925.....	1,070.00	
Norfolk and Washington Steamboat Co.:		
$500 5 per cent. Coupon Trust Bond, due 1931	515.00	
U. S. Steel Corporation:		
$3,000 5 per cent. Sinking Fund Gold Coupon Bonds, due 1963.....	3,060.00	
Washington Railway and Electric Co.:		
$1,000 4 per cent. Consolidated Mortgage Gold Bond, due 1951.....	860.00	
Washington Gas Light Co.:		
$1,000 5 per cent. General Mortgage Gold Bond, due 1960	1,105.00	
		6,610.00
		$24,318.07

Summary.

Investments as above.....	$24,318.07
Cash on hand, for Investment, August 31, 1916, Exhibit "A"	7,327.52
Total Executory Trust Funds Exhibit "M".....	$31,645.59

EXHIBIT "P."

ENDOWMENT AND EXECUTORY TRUST FUNDS, INCOME AND EXPENSES.

For the year ended August 31, 1916.

	Balance Aug. 31, 1915.		Year ended Aug. 31, 1916.		Balance Aug. 31, 1916.	
	Debit.	Credit.	Expense.	Income.	Debit.	Credit.
Endowment Funds:						
Congressional Professorship of English Fund	$.....	$ 259.77	$ 259.77	$ 268.34	$.....	$ 268.34
Corcoran Endowment Fund	.....	1,188.98	1,188.98	1,228.20	.....	1,228.20
Elton Professorship Fund	.....	180.52	180.52	186.47	.....	186.47
Alumni Professorship of Mathematics Fund	.....	.....	.....	31.80	.....	31.80
Withington Scholarship Fund	.....	50.57	.....	16.19	.....	66.76
Kendall Scholarship Fund	.....	392.15	120.00	191.79	.....	463.94
Davis Scholarship Fund	74.53	.....	.....	1.70	72.83	.....
Powell Scholarship Fund	.....	2,009.58	599.85	1,885.03	.....	3,294.76
H. H. Carter Scholarship Fund	206.25	.....	.....	.....	206.25	.....
Nellie Maynard Knapp Scholarship Fund	.....	82.52	.....	85.24	.....	167.76
Cooper Medical Research Fund	.....	1,625.25	.....	426.22	.....	2,051.47
National Park Seminary Hospital Endowment Fund	.....	168.66	.....	21.32	.....	189.98
Woodbury Hospital Endowment Fund	.....	32.08	455.00	408.46	14.46	.....
Chapman Hospital Endowment Fund	.....	169.76	3.16	52.25	.....	218.85
Tree Hospital Endowment Fund	43.05	.....	387.00	426.22	3.83	.....
Davis Prize Fund	.....	61.19	27.00	29.84	.....	64.03
Ruggles Prize Fund	40.50	.....	.....	.....	40.50	.....
Fitch Prize Fund	11.33	.....	.....	10.06	1.27	.....
Walsh Prize Fund	.....	79.17	.....	12.79	.....	91.96
Cutter Prize Fund	.....	11.70	50.00	117.77	.....	79.47
Hubbard Prize Fund	13.30	.....	40.00	42.63	10.67	.....
Sterrett Prize Fund	.....	28.33	.....	8.53	.....	36.86
Ordronaux Prize Fund	.....	148.35	200.00	173.10	.....	121.45
Executory Trust Funds:						
Denman Law School Fund	.....	19.52	19.52	.....	.....	.....
Law School Fund	.....	83.71	83.71	440.73	.....	440.73
Jacques Law School Fund	.....	165.85	165.85	178.39	.....	178.39
Jacques Medical School Fund	.....	165.85	165.85	178.39	.....	178.39
	$388.96	$6,923.51	$3,946.21	$6,421.46	$349.81	$9,359.61
Less Balances	.....	388.96	.....	3,946.21	.....	349.81
Net Balances	$.....	$6,534.55	$.....	$2,475.25	$.....	$9,009.80

Summary.

Unexpended Income, Cash on hand, September 1, 1915.....			$6,534.55
Income for Year:			
Endowment Funds:			
Income for General Purposes.....	$1,683.01		
Income for Designated Purposes.....	3,940.94		
		$5,623.95	
Executory Trust Funds:			
Income for Designated Purposes.....		797.51	
			6,421.46
Total.....			$12,956.01
Expenses for Year:			
Endowment Funds:			
Expenses for General Purposes.....	1,629.27		
Expenses for Designated Purposes...	1,882.01		
		3,511.28	
Executory Trust Funds:			
Expenses for Designated Purposes.....		434.93	
			3,946.21
Unexpended Income, Cash on hand, at August 31, 1916			$9,009.80

VOLUME XV NUMBER 4

George Washington University Bulletin

REPORT OF THE PRESIDENT

1915-16

PUBLISHED BY THE UNIVERSITY
WASHINGTON, D. C.

George Washington University Bulletin

REPORT OF THE PRESIDENT

Volume XV, Number 4,

December, 1916

PUBLISHED FOUR TIMES A YEAR; IN MARCH, JUNE, OCTOBER AND DECEMBER

Entered October 6, 1904, at Washington, D. C., as second-class matter under Act of Congress of July 16, 1894

GEORGE WASHINGTON UNIVERSITY

Report of the President

WASHINGTON, D. C., December 31, 1916.

TO THE CHAIRMAN OF THE BOARD OF TRUSTEES:

SIR: I have the honor to present herewith my report upon the affairs of the George Washington University for the academic year 1915–16 which ended August 31, 1916, to which is added a brief mention of the events occurring in the history of the University up to the date of this report.

The prescribed courses in the various departments of the University were carried on last year until the annual commencement June 7, 1916. The maximum registration in all departments for the year was 1973. The largest number of students in attendance at any one time was 1772. These numbers show a decided increase over the numbers of any previous year.

The distribution of the students in the various departments of the University up to the time of the Annual Commencement, giving the maximum registration in each case was as follows:

DEPARTMENT OF ARTS AND SCIENCES

School of Graduate Studies	115	
Columbian College	699	
College of Engineering	231	
Teachers College	152	
	1,197	
Duplicates	3	1,194

Professional Schools

Medical School	149	
Dental School	126	
Law School	424	699

Associated Colleges

National College of Pharmacy	48	
College of Veterinary Medicine	65	113
		2,006
Duplicates		33
		1,973

The teaching staff of the University for the same time was as following:

Teaching Staff

(Omitting Faculties of Associated Colleges)

In many instances members of the Teaching Staff give only part time to the University

Professors	81
Associate Professors	9
Associates	9
Assistant Professors	19
Lecturers and Instructors	84
Assistants and Demonstrators	32
	234

These tables do not include the registration of the Summer School of the University which was established during the summer of 1916 and which consisted of the following registration:

Arts and Sciences	166	
Medical School	36	
Law School	64	266

The residential building No. 2017 G Street adjoining the Main University Building on the east was purchased during the year. This building was enlarged by the addition of an extension in the rear and re-modeled so as to provide four large class rooms which have been needed and which met the demand for additional space caused by the increased registration. Offices for instructors were also provided on the third floor of this building.

The removal of a class room in rear of the Library of Arts and Sciences gave an opportunity to make an extension of the reading room of this library, which was equipped with modern library tables and desks and very convenient individual desk lights. The increased use of this reading room is an evidence of the desirability of the changes and improvements.

Although properly a matter for the present academic year, I will further mention that the continually increased demand for facilities and space, added to its general desirability, caused the Trustees to purchase very recently additional adjoining property to the west, represented by the dwelling house No. 2027 G Street with its yard in the rear. This will be fitted for special University uses later in this year.

Contributions to the University funds were received from various sources during the past year as follows:

Prizes	$75.00
Maintenance	5,925.00
Buildings and Grounds	3,676.27
Furniture	40.00
Restoration of Cutter Fund income	75.14
Geology laboratory	74.01
Total	$9,865.42

Endowment funds were received as follows: Alumni Professorship of Mathematics Fund, $746.09; Theodore J. Mayer bequest for the Hospital, $4,078.95, a total of $4,825.04. The payments on the mortgage debt were made during the year to the amount of $5,300.00, leaving the mortgage debt at the close of the year $31,152.50. This does not include the non-interest bearing deed of trust on the Medical property of $323,-430.23 which covers the liability to the principal of the endowment fund as shown by the Treasurer's report. This sum has been the subject of investigation and revision by the Finance Committee and Counsel of the University, duly approved by the Board of Trustees and the deed of trust has been corrected to meet the amount just given.

During the past summer a continuation school to which I have already referred was inaugurated from June 26 to August 4,

a period of six weeks, which was confined to the Departments of Law, Medicine and Arts and Sciences. The total enrollment was 266 which was encouraging under the circumstances and for the first year. The Director of the Summer School reports that "the work given was thorough, being quite up to the standard of that given during the regular session, the attendance was excellent, and a wholesome spirit of coöperation pervaded both faculty and student body." It is expected to contnue this school from year to year, developing its scope and resources.

The reports of the various Departments for 1915–16 shows a general improvement in enrollment, entrance requirements and standards of teaching. Appended to this report will be found interesting reports from the Deans of the Departments of Arts and Sciences, of Graduate Studies and of the Law School.

As the space generally afforded by this publication will not permit the printing of the reports of the other Deans and the Librarian, I will present a brief synopsis of their contents.

The Dean of the Columbian College, which college is naturally and properly the main school of the University, reports an enrollment during the year of 699 students. The outlook for the present year, 1916–17, gives reason to believe that there will be a continued increase in the total enrollment for Columbian College. The large number of special students enrolled in this College has been dwelt upon in former reports. Their attendance upon certain lectures and courses brings to us a similarity to some of the European Universities, supplemented as this is in many cases by research work in the School for Graduate Studies, for which by Act of Congress, facilities are available in the different departments of the general government at Washington. In the Columbian College there were last year 434 men and 262 women. "Sixty-five per cent of the students were employed in outside pursuits and were paying their own way through college. This number includes a large registration from the Government Service, teachers in the public schools, and a considerable number of other students who have temporary employment as a means of meeting their Col-

lege expenses. They are in general relatively mature and earnest students well prepared for the College courses."

The College of Engineering offers courses in four lines of work, Architecture, Civil Engineering, Electrical Engineering and Mechanical Engineering.

The students in this College for the year can be classified as follows:

Former students of the College of Engineering	126
New students	100
Students previously registered in other departments of the University	5
Total	231
Number of men	227
Number of women	4
Candidates for Degrees	
Bachelor of Science in Architecture	20
Bachelor of Science in Civil Engineering	54
Bachelor of Science in Electrical Engineering	26
Bachelor of Science in Mechanical Engineering	36
Special students	95
	231

There has been a steady augmentation of late years in the enrollment in the Teachers College which is a testimony to its increased efficiency. The students in this school are almost entirely women. The total registration for 1915–16 shows the student body to be: Men 7; Women 146. The following table classifies the students as to their employment:

Teaching	108
Government service	5
Home making	8
Stenography	1
Library work	1
School nursing	1
Unemployed	29
Total	153

Practice teaching was done in the Demonstration School conducted in St. John's Church Orphanage. Work in obser-

vation was done, as heretofore, in the public schools of Washington.

The Medical School of the University includes in addition to the Medical School, the University Hospital, Medical Dispensary and the Training School for Nurses.

The number of regular Medical students enrolled for the session 1915–16 was 141, and special students 8, a total of 149. There were six women students enrolled during the year. There has been a steady increase in the number of matriculants under the existing requirements in the last three years. Dean Borden reports that the fluctuation in the size of the student body and variation in the sizes of the classes, due to change of entrance requirements, makes the conduct of the Medical School difficult.

"Difficulty is also encountered," he says, "through the constant change of requirements for equipment and teaching demanded by the Council on Education of the American Medical Association. It is unfortunate that a permanent basis for admission and teaching has not as yet been reached so that the Medical School can be normally conducted according to some fairly fixed standard. The steady increase in matriculants under existing requirements indicates that an adequate student body can be obtained if a standard entrance requirement can be established and continued but so long as the entrance requirements are being changed, the fluctuation in total numbers and decrease of matriculants with each increase of requirements, is bound to occur."

* * * "The annual income from the University Hospital, the Medical School and the Dental School combined, was sufficient to meet all expenses."

Seventeen nurses were graduated from the Training School for Nurses at the annual Commencement in June, 1916.

A number of repairs to the Nurses' Home were made by the Board of Lady Managers during the year. This Board also paid $500.00 on the trust upon the Nurses' Home and $300 was paid from the Hospital funds, leaving a balance due on the Nurses' Home Building of $9662.50. I must here testify to the generous and self-denying exertions of the Board of

Lady Managers who have done so much to keep the Hospital in its excellent condition.

The Dental School of the University has adopted the four year course in accordance with the requirements of Class A Dental Schools as agreed upon by the Dental Educational Council of America on July 24, 1916. This will naturally have the effect of reducing the number of matriculants for the coming year of 1917–18, but in the end will have a satisfactory effect upon the Dental School and its general standing.

Improvements and additions have been made to the equipment of the laboratories and dental dispensary, which have been required by the increased number of students enrolled.

The report upon the Law School by its Dean will be found appended to this report. This school is second in point of enrollment among the schools of the University. It has continued to maintain its high reputation in its standards of instruction and in the scholarship of its students.

The associated colleges of Pharmacy and Veterinary Medicine have maintained standards sufficiently high to justify our annual award of degrees to those who have met the requirements of their curriculum. Their graduates have as a rule passed the examinations of the State Boards of Pharmacy and also the Civil Service Examination for entrance into the government service as veterinarians.

The Library of the Department of Arts and Sciences has received during the year ending August 31, 1916, 1222 additional volumes. Of these 551 came by purchase, 601 by gift and exchange and 70 by binding.

There is now in this library as follows:

Bound volumes	30,326	
Unbound	10,759	
Total	41,085	41,085
In the library of the Law School		7,102
In the library of the Medical School		3,476
In the University libraries		51,663

A distinguishing feature of the year in this department was the loan by the American Institute of Architects of their valuable collection of 1063 volumes including many portfolios of plates and drawings. The conditions upon which this loan to the library was given, including cataloguing, etc., are being complied with as rapidly as possible.

The following degrees were conferred by the University during the year:

At Midwinter Convocation on February 22, 1916

Doctor of Civil Law	1	
Bachelor of Arts	4	
Bachelor of Science in Civil Engineering	1	
Master of Laws	1	
Bachelor of Laws	12	
Doctor of Dental Surgery	5	24

At the Annual Commencement, June 7, 1916

Bachelor of Arts	51	
Bachelor of Science in Chemistry	2	
Bachelor of Science in Medicine	2	
Bachelor of Science in Architecture	1	
Bachelor of Science in Civil Engineering	4	
Bachelor of Science in Electrical Engineering	5	
Doctor of Medicine	27	
Doctor of Dental Surgery	21	
Bachelor of Laws	54	
Master of Laws	10	
Doctor of Pharmacy	15	
Doctor of Veterinary Medicine	12	
Civil Engineer	1	
Mechanical Engineer	3	
Master of Science	5	
Master of Arts	17	
Doctor of Philosophy	6	223

Honorary degrees as follows:		
Doctor of Letters	1	
Doctor of Science	1	
Doctor of Divinity	1	3
	—	—
Total for the year		250

The great needs in the way of appropriate buildings for the University are a Law School Building and a Science Hall. The Law School is now placed in the upper stories of the New Masonic Temple which does not afford the accessibility, space or convenience required by the numbers in attendance upon this important department of the University.

The Trustees have authorized a movement to raise funds to purchase a site and erect a building properly constructed and arranged for the purpose of a modern Law School with its well equipped library. This should be dignified in its character and architecture, fire proof and of a size sufficient to meet fully the wants of the School. There are funds now in possession of the Treasury, given or acquired upon conditions which allow their use for the purpose just indicated. These available funds amount at present in cash and securities to $21,242.73. Additional cash and pledges are on hand amounting to $10,960.00. It is hoped that additional subscriptions and efforts will be made by friends of the University to raise the minimum sum of $100,000 to purchase a site and erect the Law School building desired.

The need for a Science Hall, fire proof in construction is at least equally great. The Chemistry laboratories of the Department of Arts and Sciences are so over-crowded that we have been obliged for that cause to withdraw students from certain laboratory instruction. A Science Hall, properly endowed, should be placed near the other buildings of Arts and Sciences and should combine other laboratories now scattered in buildings not fire-proof or built for such purposes.

The income received from the tuition fees of the students and its modest endowments is used almost entirely for salaries, wages and the general up-keep of the University and its equipment. When new buildings are wanted special appeals have to be made to the community for whose advantage the University exists. It is to be hoped that the communal spirit of Washington, somewhat dormant at present, can be aroused to an extent to enable the University to expand properly with the growth of its enrollment and the increasing needs of the institution. The requirements of the University should be

considered every year as a legitimate demand upon the income of every intelligent and public spirited citizen.

In closing I wish in behalf of the University to express a high appreciation of the members of the community who have contributed by money and service to the success of the University. They are not very great in number, but they are great in public spirit and in many cases self-denying in its exhibition. Such men and women live up to the full demand of American citizenship and afford an example to others who from one cause or other fall short in unselfishness in the civic standards of the day and of the nation. I am

Respectfully

CHARLES H. STOCKTON,
President.

To the President of the University:

Dear Sir: I have the honor to submit the following report in regard to the Department of Arts and Sciences for the session of 1915–16.

The enrollment was as follows:

	Men	*Women*	*Total*
Graduate School	91	24	115
Columbian College	440	259	699
College of Engineering	227	4	231
Teachers College	9	143	152
	767	430	1197
Duplicates	3		3
	764	430	1194
Candidates for a degree			792
Special students			402

The undergraduate students were divided between day students and afternoon students as follows:

	Men	*Women*	*Total*
Day students	181	185	366
Afternoon students	494	220	714
	675	405	1080

A comparison of the total enrollment and of the enrollment in Arts and Sciences in the six years since 1910 shows the following results.

Comparison of Enrollment

YEAR	STUDENTS IN UNIVERSITY	STUDENTS IN ARTS AND SCIENCES	PER CENT IN ARTS AND SCIENCES
1910–1911	1277	681	53.3
1911–1912	1270	733	57.7
1912–1913	1347	778	57.8
1913–1914	1611	905	56.2
1914–1915	1790	1047	58.5
1915–1916	1973	1194	60.5

The average attendance in classes and the distribution of the students in the several divisions of the Department are shown in the following table:

Average Enrollment in Classes

		GRADUATE	COLUMBIAN COLLEGE	ENGINEERING	TEACHERS COLLEGE	TOTAL
Applied Mathematics	20, 22			12		12
	21			11		11
Archaeology	20		2			2
	21		10		6	16
	50		2		2	4
Architecture	2		3	12		15
	3			16		16
	4			16		16
	5			5		5
	8		1	4		5
	20		1	5		6
	21		2	8		10
	22, 41			9		9
	24			3		3
	25			3		3
	33		2	5		7
	39			4		4
	40			2		2
	44			4		4
Astronomy	1		9		1	10
Botany	1		10		1	11
Chemistry	1		90	37	4	131
	2		75	4	4	83
	3		33	2		35
	6	1	19	16		36
	7		2	22		24
	20	1	25			26
	21	2	15			17
	23	7	33	1		41
	24	8	16			24
	25	3	8			11
	26	3	14			17
	27	1				1
	28	3	1			4
	56	1				1

Average Enrollment in Classes—Continued

		GRADUATE	COLUMBIAN COLLEGE	ENGINEERING	TEACHERS COLLEGE	TOTAL
Civil Engineering	1			17		17
	2			4		4
	3			16		16
	4			14		14
	8			8		8
	20			4		4
	21			4		4
	22			4		4
	23			7		7
	24	1		4		5
	50	1				1
	51	2				2
	52	6				6
	54	1				1
Economics	1	3	39	3	3	48
	2	1	53	1	5	60
	22, 23	3	19		7	29
	27, 26	4	10	1		15
	33	5	16	3	1	25
	36	4	17		2	23
	40, 41	5	7		1	13
	43, 44	4	14		1	19
	51	2	2			4
Education	20		8		9	17
	21	3	2		22	27
	22	4	9		11	24
	24	5	1		9	15
	25	7	1		10	18
	28	3			6	9
	29		2		9	11
	31				9	9
	34	2	1			3
	35	1	1		3	5
	50	15				15

Average Enrollment in Classes—Continued

		GRADUATES	COLUMBIAN COLLEGE	ENGINEERING	TEACHERS COLLEGE	TOTAL
Electrical Engineering	2			3		3
	6			6		6
	7		6	8		14
	21	2		3		5
	22			2		2
	23			3		3
	24			2		2
	26	3		2		5
	27			3		3
English	1		83	11	14	108
	2		106	24	20	150
	3		32		8	40
	4	2		34	7	43
	5		3		4	7
	20	1	7			8
	21		8			8
	22	1	30	1	8	40
	52	5	16		4	25
French (two sections)	1	1	26	5	3	34
	2		34	10	7	52
	3		25	7	5	37
	4		16	5	1	22
	5		9		1	10
	6		3			3
	7	1	13		1	15
	21	1	5		1	7
	50	1	2			3
Geology	1		24			24
	2		28	7	1	36
	3		6		1	7
	21		5			5
	51	5				5
German	1		18	2	1	21
	2		16	2	2	20
	3		17	8	3	28

Average Enrollment in Classes—Continued

		GRADUATE	COLUMBIAN COLLEGE	ENGINEERING	TEACHERS COLLEGE	TOTAL
German—Continued	4	1	24	14	1	40
	5		16		4	20
	6	2	14		2	18
	20		6		2	8
	21	1	3			4
Graphics	1		3	24		27
	2			6		6
	8			27		27
Greek	A		3			3
History	1, 2	1	43		12	56
	3, 4	2	32		6	40
	5, 6		29		2	31
	20	1	26	1	2	30
	25	3	6		2	11
	31	2	32		3	37
	33	2	57		40	99
	54	6	11		2	19
Latin	1		3		4	7
	2		4		1	5
	21		2		1	3
	22		2		1	3
Mathematics	3		23	5	4	32
	4		8	7	1	16
	6		25	9		34
	9		14	14	1	29
(two sections)	12		20	36		56
	20		15	25		40
	21		16	6	2	24
Mechanical Engineering	1			16		16
	6			2		2
	7			4		4
	9			2		2
	10			4		4
	20, 21			5		5

Average Enrollment in Classes—Continued

		GRADUATE	COLUMBIAN COLLEGE	ENGINEERING	TEACHERS COLLEGE	TOTAL
Mechanical Engineering—Cont.	23			6		6
	24			2		2
	28	3		10		13
	29	2		6		8
	50	3				3
	51	1				1
Nautical Science	1			8		8
Philosophy	1		35		7	42
	3		37		7	44
	2		35		8	43
	4		35		6	41
	20, 21	3	5		5	13
	22	2	3		4	9
	24		3		7	10
	27	3	4		3	10
	29	2	3		5	10
	51	5				5
	52	4				4
Physics	1		19	35	1	55
	2		46	23	2	71
	3		31		2	33
	22	1	4	1		6
	60	1				1
Political Science	1, 21	3	25	1	3	32
	22, 24	3	10		1	14
	2, 27	5	38			43
	29, 30	5	26			31
Spanish	1a		27	5	3	35
	1b		33	2	4	39
	2		13		1	14
Zoology	1		39		10	49
	2	1	5		1	7
	23	1	4		3	8
	50	4	14			18
	Histology		2			2

The number of class periods a week, the number of students, and the number of "student hours" a week in the various subjects are shown in the following table:

	CLASS PERIODS EACH WEEK	AVERAGE NUMBER OF STUDENTS	STUDENT HOURS
Applied Mathematics	6	23	70
Archaeology	7	22	48
Architecture	34	105	242
Astronomy	2	10	20
Botany	3	11	33
Chemistry	45	451	1086
Civil Engineering	40	92	228
Economics	21	236	584
Education	20	153	297
Electrical Engineering	18	43	99
English	24	429	1264
French	30	183	534
Geology	10	77	152
German	23	159	459
Graphics	10	60	147
Greek	3	3	9
History	22	323	771
Latin	9	15	45
Mathematics	24	231	693
Mechanical Engineering	27	66	159
Nautical Science	2	8	16
Philosophy	22	146	378
Physics	16	166	427
Political Science	11	120	329
Spanish	9	88	264
Zoology	18	84	296

This gives a total of 456 class periods a week, and these consist of 326 lectures or recitations and 130 laboratory or drawing periods a week. This is an increase of about ten per cent over the previous year.

A study has again been made of the grades reported by instructors during the year, and the following table shows the total number of term marks reported in each subject, and percentage of marks in each grade. The "theoretical average" is taken from a report on grading made two years ago by a committee of which Dean Ruediger was Chairman.

Distribution of Grades

	TOTAL NUMBER OF MARKS	PERCENTAGE				
		A	B	C	D	E
Applied Mathematics	34	0	6	29	47	18
Archaeology	42	33	31	33	2	0
Architecture	196	8	41	38	7	6
Astronomy	18	33	50	6	11	0
Botany	20	10	25	60	5	0
Chemistry	715	12	41	31	14	2
Civil Engineering	114	3	28	31	29	9
Economics	419	14	28	40	16	2
Education	229	12	29	42	14	3
Electrical Engineering	69	7	28	45	19	1
English	718	34	41	18	4	3
French	313	11	26	37	15	11
Geology	126	19	33	32	14	2
German	300	16	30	31	18	5
Graphics	98	12	13	27	35	13
Greek and Latin	36	28	14	42	14	2
History	444	19	38	20	17	6
Mathematics	451	13	16	20	25	26
Mechanical Engineering	93	14	28	30	20	8
Philosophy	391	8	23	34	29	6
Physics	318	16	21	20	23	20
Political Science	209	20	34	29	13	4
Spanish	145	23	21	29	21	6
Zoology	120	29	25	15	17	14
General Average	5618	16	31	29	16	8
Theoretical Average	.....	4	24	44	24	4

A comparison of these figures with those in my reports for the last two years shows but slight changes in the percentages in the subjects that are taken by a large number of students. While there may be doubt as to the accuracy of the theoretical distribution with which these figures are compared, it is certain that there are departures from the general average of these grades that are clear evidence that some instructors have a habit of giving grades too high, and others of giving grades too low. It is reasonable to suppose that to some extent students are influenced in their selection of elective courses by the reputation of the instructor for giving high marks. This is a factor that obviously should not enter into any such election. A discussion of the matter will be invited at a Faculty meeting in the near future.

A study has been made of the averages obtained by the students in the three undergraduate colleges. The grades used by the Department of Arts and Sciences are: A = 96–100; B = 90–95; C = 80–89; D = 70–79; E = Failure; F = work incomplete.

For the purpose of this study of standings of students the following percentages were arbitrarily assigned to the letters, A = 98; B = 92.5; C = 85; D = 75; E = 55.

Averages

	MEN	WOMEN	GENERAL
Columbian College	85.0	88.1	86.0
College of Engineering			81.9
Teachers College			90.3
General Average	84.0	88.9	86.4

As there are so few women in the College of Engineering and so few men in Teachers College, no attempt was made to separate the marks of men and women in those Colleges, but the marks are separated in forming the general average.

It is seen that the average in Teachers College is higher than in the other colleges. Probably one reason for this is that the students in that college are mainly teachers and therefore presumably persons trained in accuracy of reasoning and exactness in expression. Furthermore, they take fewer courses of study each year than is the average in the other colleges.

The lower average in the College of Engineering is due, in part at least, to the fact that the students take the technical subjects in which the grading is lower than in the literary studies.

There is a notable difference in the averages of men and of women. To what extent this is due to better intellectual powers, to greater industry, to greater pride in high marks, or to a selection of topics where marks average higher than those selected by men, I do not attempt to state. It would be an interesting and valuable investigation to obtain the separate averages of the men and of the women in each general subject of instruction, and thus answer in part the above queries. Time has not permitted such an investigation, but I hope to make one later.

A further study of the marks of fraternity and non-fraternity men and women was made and resulted as follows:

General average of all men	84.0
Average of fraternity men	82.1
Average of non-fraternity men	84.5
General average of all women	88.9
Average of fraternity women	88.2
Average of non-fraternity women	89.4

The averages of the several fraternities were as follows:

Men's Fraternities

Phi Alpha	87.0
Kappa Alpha	85.6
Kappa Sigma	85.0
Theta Delta Chi	83.1
Sigma Nu	82.6
Delta Tau Delta	81.5
Phi Sigma Kappa	81.0
Sigma Chi	79.0
Sigma Phi Epsilon	75.3
Sigma Alpha Epsilon	74.0

Women's Fraternities

Sigma Kappa	90.0
Pi Beta Phi	88.9
Chi Omega	86.3
Phi Mu	85.9

It is to be noted that members of the men's fraternities are found in all departments of the University, while membership in the women's fraternities is confined to students of the Department of Arts and Sciences. It is probable, therefore that the averages for the men's fraternities and the relative standing of the several fraternities might be considered changed were the marks of the student members from the professional schools included.

It is very clear that the non-fraternity students rank higher in scholarship than the fraternity students. Among the men there are ten fraternities. Three of these rank higher than the average of all men; two others rank higher than the average of fraternity men but lower than the average of all men; while five are below both averages.

Among the women, one fraternity is higher than the average of all women and of the non-fraternity women; a second has the same average as all women but is below the average of non-fraternity women; while the other two are below both averages.

While I believe that membership in a fraternity gives a person certain advantages of college life that are lacking otherwise in considerable measure at this University because we have no dormitory life, yet the

scholarship average seems to be lowered to a greater extent than should be the case. It may be there is too great a tendency for the fraternities to lay stress on social qualities, on personal popularity, on activity in student affairs, in choosing members. It may be that fraternity duties and fraternity pleasures make too great a call on the student's energy and time. To the extent that these are influential in retarding or lowering scholarship, they are evils to be overcome.

I know that the thinking men who are the leaders in the fraternities, both among the national officers and among the local officers, are giving large consideration to the improvement of scholarship. I have had correspondence with several national officers and have had consultations with the local officers and alumni advisers of some of our fraternities. A number of the fraternities have committees on scholarship, and we are furnishing these committees information about the scholastic work of the members. It is believed that this will result in raising the scholarship average in a number of cases.

The growth of the Department of Arts and Sciences presents continual problems for solution. During the session of 1915–16 a number of classes became larger than was wise for proper teaching notwithstanding the fact that additional courses of study had been offered and had received gratifying enrollments and additional sections in old courses had been formed.

A lecture course may be given to as many persons as can find seats in a class room, but lecture courses for Freshmen and Sophomores, while attractive, are not conducive to exact scholarship nor to that personal mental effort which distinguishes the student from the mere repeater of phrases, unless such lectures are accompanied by numerous oral and written tests. While some subjects, from their nature, can most properly be presented in lecture form even to students in the lower classes, yet I fear that the growth of the classes has brought the lecture method into wider use than is scholastically wise. The effective remedy is the formation of additional sections, and the limitation of the enrollment in a section. This means additional men on the Faculty, and as rapidly as finances permit this should be done.

In the meantime, help may be given by the appointment of student assistants who can assist in the grading of test papers and perhaps, conduct quiz sections.

Our attendance of day students is increasing. During 1915–16 there were about one hundred more than during the previous year, and it is probable that the increase will be nearly as great for the session of 1916–17. It is desirable to give to these students full courses before five o'clock in all of the required subjects of the curriculum, and in all of the principal elective studies. This is now being done in many branches, but we are particularly weak in day courses in science. Laboratory courses in Chemistry and Zoology may be had before five o'clock, but no class courses; laboratory and class work on Physics may be had

before five o'clock; no course in Botany is given before five o'clock; one course in Geology may be had before five o'clock.

I believe we should now develop our work in Botany by the appointment of a full time Instructor, to give both morning and afternoon courses. Work in that subject should be very attractive to a large body of our students both in Columbian College and in Teachers College.

Another line of work which we can well develop here is in economics, political science, commerce and business administration. Our present enrollment in the courses we now offer in these lines shows an increasing demand for the work, and it is a demand that we should meet in still larger measure.

I have had many conferences with the Dean of Columbian College in regard to these matters, and I cordially endorse the suggestions he makes in his annual report. I have also had several conferences with the members of the Faculty teaching in these lines, and it is expected that later in the year definite recommendations will be presented to you.

On the engineering lines, it is planned to prepare an outline of a new course in Chemical Engineering in the hope that it can be started next session.

A first course in Naval Architecture is now being given, and after a few months experience we will be in a position to determine whether it will be wise to arrange advanced courses in the technical work in that line, so as to offer a course leading to the degree of Bachelor of Science in Naval Architecture.

Respectfully submitted,
H. L. Hodgkins,
Dean.

November 15, 1916.

To the President of the University.

Dear Sir: I have the honor to present herewith my report on the School of Graduate Studies (University Research) for the year 1915–16, which marks the completion of twenty-two years' work.

The students enrolled and the degrees sought by them are set forth in the following table:

TABLE I

Students Enrolled 1915–16—By Categories

In Attendance	4
Civil Engineer	3
Electrical Engineer	2
Mechanical Engineer	5
Master of Arts	43
Master of Science	24
Doctor of Civil Laws	1
Doctor of Philosophy	34
Total	116

The total enrollment was 19 larger than for the academic year 1914–15. In fact it was the largest enrollment for any academic year since that of 1893–94 in which this school of the University first enrolled students.

The range of territory from which these students were drawn is shown in the following enumeration of their homes on the registration papers:

TABLE II

States of the United States

California	1
Colorado	1
Connecticut	1
District of Columbia	43
Illinois	2
Kansas	3
Maryland	10
Massachusetts	4
New York	11
Ohio	3
Pennsylvania	3
Utah	3
Virginia	3
Wisconsin	5

Foreign Countries

China	3

As shown last year, the preponderance of students is from the District of Columbia, New York and Maryland, but the representation for these political divisions constitutes but 55.1 per cent of the total as compared with 58.8 per cent for 1914–15. The residue is distributed among 32 other states of this union and foreign countries.

Of the students enrolled there will be noted during the year the withdrawal of 12, the dropping of 3, the suspension of 1, and the death of 1. There was graduated the following, divided according to their several categories:

TABLE III

Graduates of 1916

Doctor of Civil Laws	1	in February
Civil Engineer	1	in June
Mechanical Engineer	3	in June
Master of Science	5	in June
Master of Arts	17	in June
Doctor of Philosophy	6	in June
Master of Science	1	in October
Master of Arts	1	in October
Total	35	

In order that a candidate may secure one of the above degrees from this University it is required that the candidate for an Engineering or a Master's degree shall spend at least one year at this University in residence study of the various assigned topics and that a candidate for the Doctor of Philosophy degree shall spend two years in the study of the agreed upon topic, as set forth in our Catalogue. Nevertheless, from the foundation of the School of Graduate Studies it has been recognized that it is unwise to press students who are preparing for or engaged in research work by applying to them the fixed time requirements which operate wholesomely in most undergraduate institutions. Furthermore, graduate students should be, and usually are, mature, and hence it is unnecessary to apply to them the disciplinary methods which are essential for the immature. Moreover, many of them before entering upon registration for higher degrees have assumed important and serious responsibilities. Hence, from the foundation of this School much tolerance has been shown candidates relative to this time requirement and while all have been held to the satisfaction of the minimum limit, no ultimate maximum limit has yet been fixed. In view of

this wise and liberal consideration of the student body it is of interest to inquire to what extent this liberality is availed of and this is shown in a measure in the following table wherein is shown the number of years that the candidates who received diplomas in 1916 remained in candidature at this University:

TABLE IV

Years of Candidature for Graduates in 1916

DEGREES	YEARS		
	One	Two	Three or more
Engineering	2	2	
Master of Science	3	2	1
Master of Arts	14	4	
Doctor of Civil Law			1
Doctor of Philosophy		4	2
	19	12	4

From inspection of Table IV it appears that all except twelve, or 65.7 per cent of the total graduates fulfilled all of the requirements exacted of them in the minimum time. In the case of those who required a larger number of years in which to fulfil the requirements exacted of them delay was, in most instances, found to lie in the completion of the research which had been undertaken and in the preparation of the thesis. One of the candidates was serving as a U. S. Consul in Mexico and he naturally found it difficult to devote much consecutive time to the preparation of his thesis. Most of the others were engaged in professional work which also interfered with their progress in the preparation of their theses.

This matter of the extent to which candidates exercised the privilege of extending their candidature beyond the minimum limit fixed is set forth in another way in Table V where is presented the total number of candidates for the year 1915–16 in their several categories, divided according to the length of candidature for each.

TABLE V

Number of Candidates for Degrees in Various Years of Enrollment

YEAR	PH.D.	ALL OTHER DEGREES	TOTAL	PER CENT
First	16	53	69	62.2
Second	9	18	27	24.3
Third or more	9	6	15	13.5

From this it appears that the total number of candidates in all categories enrolled in 1915–16 who have continued in candidature for more than the minimum length of time was 33, or 29.7 per cent, of the total enrollment, and that of the total of 15, or 13.5 per cent, 6 candidates, or 5.4 per cent of all were enrolled in candidature for engineering or master's degrees for which the minimum time requirement for residence is one year. All of these candidates were actively engaged in the practice of their professions of teaching, engineering, chemistry, architecture, and the like, and it is believed that persons so engaged should be encouraged to extend their terms of study to a greater period of time than the minimum. To prevent abuse of this privilege, after the full tuition fee of the category has been paid, the student is still assessed a small annual fee during each year of enrollment.

Out of the 116 students enrolled (including late registrations) we are able to count but seven as giving their full time to the work, or as being otherwise unemployed, and the majority of these were women. The above expression is necessarily inaccurate since mature persons such as naturally constitute the student body of a graduate school must necessarily be engaged in other activities. The phrase might better be "engaged in a gainful employment" and it is believed that from this standpoint the statistics given above are practically accurate.

The number of women candidates enrolled were one in attendance, one candidate for the master of science degree, seventeen candidates for the master of arts degree and five candidates for the doctor of philosophy degree. That is out of the total enrollment of 116 the per cent of women students in attendance was 0.9, for master of science 0.9, for master of arts 14.6, and for doctor of philosophy 4.3. Within the categories we find the per cent of women candidates for M.S. to the total number of candidates for that degree to be 4.2, for A.M. 39.5 and for Ph.D. 14.7. It is evident that the A.M. degree is the one most largely sought by women and later, as topics are discussed, we find that the group they usually select tends naturally to that degree.

In dealing with topics it may be of interest to learn to what extent the several University Subjects are selected. By the regulations candidates for the degree of M.S., or A.M., or Ph.D. shall pursue the study of three topics, one major and two minors, not more than two of which may be selected from the same University Subject. Engineering degree requirements are more narrowly specialized. The topics are largely the preferred choice of the student but he is directed before filing his application to confer with the various professors with whom he desires to study for advice as to his choice and the final selection must always be officially endorsed. In the following table is set forth the number of times each of the given University Subjects have been elected in topics, the results being arranged in numerical order.

TABLE VI

Kind and Number of Topics for Which Students Were Enrolled 1915–16

Chemistry	35	Pharmacology	5
Education	30	Physics	5
Bacteriology	25	Preventive Medicine	5
Zoology	24	German	4
History	23	International Law and Diplomacy	4
English	20	Microscopy	4
Economics	17	Civil Engineering	3
Political Science	15	Archaeology	2
Philosophy	14	History of Art	2
Botany	10	Mathematics	2
Psychology	10	Mineralogy	2
Sociology	10	Architecture	1
Physiology	9	Histology	1
Mechanical Engineering	8	Law	1
Pathology	8	Meteorology	1
Electrical Engineering	6	Psychiatry	1
Geology	6		
French	5		

It may also be of interest to note to what extent these University Subjects have been sought by women, hence this has been determined and collated from the records and is set forth in the following table.

TABLE VII

Kind and Number of Topics for Which Women Students Were Enrolled 1915–16

English	13	French	2
History	9	History of Art	2
Education	8	Philosophy	2
Sociology	7	Preventive Medicine	2
Chemistry	3	Psychology	2
German	3	Archaeology	1
Physiology	3	Botany	1
Zoology	3	Geology	1
Bacteriology	2	Pathology	1
Economics	2	Physics	1

Inspection shows that English, History, Education and Sociology are the most generally appearing topics for women in graduate work and from that comes the drop to the sciences. An unexpected exposition from this investigation is the minor positions occupied by the modern languages and the entire absence of ancient languages, for one naturally

asks if this is due to present tendencies in education or to some defect in the University itself.

The consideration by individual University Subjects may reasonably be open to criticism when used as a gauge of the character of student activities, for obviously the topics looking to a purpose are chosen from educationally naturally related groups. For this reason these selections are restated from the group standpoint in the next table.

TABLE VIII

Topics by Groups as Selected by Candidates

Historical	
History	23
Economics	17
Political Science	15
Sociology	10
International Law and Diplomacy	4
Law	1
	70
Philosophical Group	
Education	30
Philosophy	14
Psychology	10
	54
Natural Science	
Zoology	24
Botany	10
Geology	6
Mineralogy	2
	42
Physical Science	
Chemistry	35
Physics	5
Meteorology	1
	41
Medical Science	
Physiology	9
Pathology	8
Pharmacology	5
Preventive Medicine	5
Histology	1
Psychiatry	1
	29
Science and Medicine	
Bacteriology	25
Microscopy	4
	29
Languages	
English	20
French	5
German	4
	29
Engineering	
Mechanical	8
Electrical	6
Civil	3
Mathematics	2
Architecture	1
	20
Fine Arts	
Archaeology	2
History of Art	2
	4

Inspection of Table VIII shows the Historical Science group to lead in choice by students and this is quite what one would expect in a School of Graduate Studies located at the Capital of a Nation. What surprises is that the lead over all other groups is so small. This is followed by the group of Philosophical Sciences with Education in the leadership and this again is naturally to be expected in the capital city wherein the educational activities of the Nation are correlated and, to a degree, administered. This offers a large field for cultivation by the University whose yield will respond directly to the opportunities the University presents.

Third in rank comes the Natural Sciences, followed by the Physical Sciences which are limited in number, and then the Medical Sciences. Joined with all of these is the group of Science and Medicine. These four groups are naturally related and together they have appealed to students in 141 instances out of 318, or, in other terms, in 44 per cent of selections of topics from all university topics. An element in the determination of this may be found in the unusual fostering of scientific research by our government and the location of the bureaus of science, the National Museum, the Army Medical Museum Library and other similar agencies with their aggregations of specialists and neophytes in Washington. Since such stress has, in recent years, been placed upon research by medical schools and medical institutions it is well to know that research in medical topics has been a feature of our graduate work from its inception, that it is well established here, and that the candidates selecting these Subjects are increasing in number.

Again on investigation of the statistics of these grouped subjects as in that of the individual subjects one is struck by the low rank held by the modern languages and the complete absence of the an ent languages among the chosen topics. I know that these topics are elsewhere chosen. I know that our professors are trained and equipped to direct the work of graduate students and that they are especially qualified to do so. I know also that they are overwhelmed with undergraduate duties. I feel it my duty to reiterate my recommendation that these departments be reinforced by such additional assistance as will release the seniors for a larger measure of graduate work or else that additional appointments be made of those qualified to offer graduate courses. This is an especial need of an institution located as ours is at the center of the international activities of our country.

Again reviewing the courses chosen by women we find the following groups:

	STUDENT
Natural Sciences	1
Natural and Physical Sciences	1
Physical Sciences	1
Natural, Linguistic and Historical Sciences	1
Medical Sciences	1
Medical and Philosophical Sciences	1
Medical and Historical Sciences	1
Languages	1
Languages and Historical Sciences	3
Languages and Fine Arts	2
Languages, Historical Science and Fine Arts	1
Languages and Philosophy	2
Languages and Natural Sciences	1
Philosophical Sciences	1
Philosophical and Historical Sciences	2
Historical Sciences	2

At the Thirtieth Doctorate Disputation held May 15, 1916 six candidates for the degree of Doctor of Philosophy presented themselves and successfully defended their theses. This is the most important and one of the most interesting university functions and we are most fortunate in securing the services of such eminent experts in conducting these disputations. The theses represent the results of those researches which are today recognized as fundamental in securing national preparedness and efficiency. It must be gratifying to the officers and alumni of this University to find that which it undertook more than twenty years ago and the purpose which animated it in the undertaking so widely endorsed and approved.

There has been received for distribution printed copies of the follow-lng theses:

The Beginnings of the German Element in York County, Pennsylvania, by Dr. Abdel Ross Wentz, 217 pp., Lancaster, Pa., 1916.

Nematode Parasites of Mammals of the Orders Rodentia, Lago-Morpha and Hyracoidea by Dr. Maurice C. Hall, separate from Proc. U. S. National Museum, vol. 50, pp. 1–258, 290 ill., 1 plt. Wash. Govt. Printing Office, 1916.

Also the complete page proof of The Creed of Epictetus by Dr. Ulysses G. B. Pierce which is to appear as a book from The Beacon Press, Boston.

Much time is given to correspondence with the officials of other graduate faculties. Where applicants present credentials from less widely known institutions inquiries as to the local status is made of the officers

of the State University or the most prominent university of that location. The replies are submitted to our officials who consider the student's application and are filed in our archives for future reference.

Recognizing that this Graduate School is the pioneer institution here and ranking with the older graduate schools of the country inquiries are being received in increasing numbers from the responsible officials of other institutions relative to methods of administration and matters of policy in the conduct of schools of research.

Respectfully submitted,

CHARLES E. MUNROE,

Dean, Faculty of Graduate Studies.

To the President of the University.

Sir: I have the honor to submit the following report on the Law School for the Academic Year 1915–16.

Before entering on details of the year, it seems fitting at this time to outline the policy which the school has been following, steps taken in pursuance of it, and the results of the policy. I have chosen the last six years as the period for this survey.

The School being a department of an eleemosynary institution looks upon its degree conferring power as a trust to be administered with due regard to the students, the profession for which they are preparing themselves, and the public for whose service the profession exits. It believes that the students should be provided with the best possible facilities both in equipment and instruction, but should on the other hand be required to have preliminary education, aptitude for the law, and professional training, to fit them thoroughly for public service.

The premise is that law schools and the Bar exist for public service. This view is well expressed in an address by Hon. Elihu Root as President of the American Bar Association, at the annual meeting in Chicago, August 30, 1916. He said:

"We at the Bar are not producers. We perform indeed a necessary service for the community. * * * Superfluous lawyers, however, beyond the number necessary to do the law business of the country, are mere pensioners and drags upon the community and upon all sound economic principles ought to be set to some other useful work. * * *

"There are indeed two groups of men who consider the interests of the community. They are the teachers in the principal law schools and the judges on the Bench. With loyalty and sincere devotion they defend the public right to effective service; but against them is continually pressing the tendency of the Bar and the legislatures and, in a great degree of the public, towards the exclusively individual view.

"The public tendency is exhibited at the very beginning of the whole business in permitting admission to the Bar without adequate education and training. Few ideas have been more persistent throughout this country than the idea that the prevailing consideration in determining admission to the Bar should be that every young man is entitled to his chance to be a lawyer and that all requirements of attendance in offices and law schools and for difficult examinations are so many obstacles in the way of liberty and opportunity, defenses of aristocratic privilege, and derogations from democratic right. The law schools have been slowly winning their way along the lines of better training for the Bar, but the progress is very slow and the pressure for brief and easy ways to get a license to practice is continuous. * * *

"No one can help sympathizing with the idea that every ambitious young American should have an opportunity to win fame and fortune.

But that should not be the controlling consideration here. The controlling consideration should be the public service, and the right to win the rewards of the profession should be conditioned upon fitness to render the public service. No incompetent sailor is entitled to command a public ship: no incompetent engineer is entitled to construct a public work; no untrained lawyer is entitled to impair the efficiency of the great and costly machinery which the people of the country provide, not for the benefit of the lawyers but for the administration of the law."

The Law School has made during the past six years considerable improvement in equipment. While compelled to carry on work in rented quarters, they were fitted in the best possible manner, unsuitable fittings were removed and new benches and chairs installed in the class rooms at a cost of $1000. The appropriation for library purposes has increased from $1000 to $1500 per year and the library has grown from 5300 volumes in 1910 to 7102 volumes in 1916.

There has been the largest development in the nature and amount of instruction. The case method of instruction which had been partially used for some years prior to 1910 has been extended to all the substantive law subjects, and to those adjective law subjects for which it is suitable. The merits of this method are now appreciated even by its former opponents, and it has been adopted by almost every law school of the first class in the United States. The Carnegie Foundation for the Advancement of Teaching had Dr. Redlich, of the University of Vienna, an eminent scholar in Anglo-American law, investigate methods of legal education in America in 1914. After an exhaustive investigation he submitted a report which was published as Bulletin No. 8 of the Foundation. The report is highly commendatory of the case method, affirms its great value as a method of training, and testifies to its great practical success.

"I visited," Dr. Redlich says, "particularly classes of the third year, in which difficult cases, as for example cases involving a 'conflict of laws' were analyzed by the students with great readiness and grasp of the subject matter; classes in which there stood out strongly not only excellent logical training, capacity for independent study, and especially for quick comprehension of the actual point of law involved, but also indisputable knowledge of positive law. I gained the impression that law students in the third year in our European law schools would hardly ever be found competent for such work." He states further that in so far as the aim of legal education is the development and training of young lawyers "the case method is undoubtedly successful." "The American student gains in the modern law schools of his country, all the practical knowledge of the law that any school can give to a future attorney or judge in an unparalleled manner."

The Bar has come to a true appreciation of the method. In the ad-

dress by the President of the American Bar Association above referred to, he said:

"The only way to clarify and simplify our law as a whole is to reach the lawyer in the making and mold his habits of thought by adequate instruction and training so that when he comes to the Bar he will have learned to think not merely in terms of law but in terms of jurisprudence. The living principle of the case system of instruction in our law schools is that the student is required by a truly scientific method of induction to extract the principle from the decision and to continually state and restate for himself a system of law evolved from its history. He is thus preparing not merely to accept formally dogmatic statements of principles but to receive and assimilate and make his own the systematic thought and learning of the world in the science of jurisprudence. With a Bar subjected generally to that process of instruction, the more general systematic study of jurisprudence would follow naturally and inevitably, and the influence of that study would be universal; and from that condition would evolve naturally the systematic restatement of our law, by men equal to that great work."

The scientific statement of the law developed by the case method requires study and research, and made it necessary that instructors make teaching a vocation. Leading schools began requiring their instructors to quit practice, and so important is this now deemed that the Executive Committee of the Association of American Law Schools has recommended for consideration at the next meeting of the Association a resolution requiring that the faculty of a school shall consist of at least three instructors who devote substantially all of their time to the work of the school, as a condition of admission to membership of the Association. This school had three instructors in 1910–11 giving their full time to the work; the number has grown to six. These full-time instructors are now teaching substantially all the substantive law subjects.

The number of part-time instructors, ten in 1910–11, had decreased but one in 1915–16. The school recognizes the necessity of teaching the application of the law, and realizes the value of the services of men actively engaged in the profession for this work. Thus adjective law subjects are generally taught by judges or lawyers in active practice.

The amount of instruction offered has been greatly increased, and made more available, by being given both forenoon and afternoon. In 1910–11 some subjects were given between 9 a.m. and 12 n., but many only in the afternoon. In 1915–16 several elective subjects were given at 7.50 a.m., a complete course between 9 a.m. and 12 n., which was repeated with additional subjects between 4.50 and 6.30 p.m. The following table shows the changes enumerated above.

	NO. INSTRUCTORS		AVERAGE HOURS PER WEEK INSTRUCTION					TOTAL
					Time given			
	Full time	Part time	By full time instructors	By part time instructors	7.50 a.m.	9 a.m. to 12 n.	4.50 to 6.30 p.m.	
1910–11	3	10	36½	20½	0	19½	37½	57
1915–16	6	9	61	19½	4	32	44½	80½

There have been several advances in the requirements for admission. The preliminary education required of all candidates for the degree of Bachelor of Laws in 1910 was a four year high school course, now candidates under twenty-one years of age must have a year of college work. Candidates eighteen years of age lacking the complete high school course were admitted as special students eligible for the degree if they made a certain average in the course; now special students must be over twenty-one and are ineligible for a degree. Advanced standing was given for work done in lawyers' offices, for law subjects studied in college, and for studies pursued in most law schools; now credit is given only for work done in law schools which substantially comply with the requirements of the Association of American Law Schools. Candidacy for the Master of Laws degree which was open to members of the Bar, or graduates of most law schools, is now restricted in the same manner. Each of these changes involved a considerable loss of students.

The standard of the law course has been much raised. The Bachelor of Law degree given for sixty units of work was abolished, and the minimum work for a degree became seventy-two units, the usual law school requirement. The Master of Patent Law degree which was given for four units of post-graduate work now requires twenty units.

The work must be more thoroughly done. There was no fixed rule regarding attendance on classes, now students absent from more than 10 per cent of the classes in any subject are denied credit for the subject unless their absences are excused. Students were allowed to continue in the school without regard to their scholarship record. Now a committee of the Faculty examines the record of each student after the midyear, and again after the final examination. Students are warned, placed on probation, required to repeat all the work of the year, and denied re-admission to the school when the Committee is convinced they are unfit for the work. In the year 1915–16 40 were warned, 9 put on probation, 24 denied re-admission or required to repeat the work which usually results in their quitting the study or going to other schools. The work of this Committee has a wholesome effect by the elimination of the incapable and indolent and the pressure it brings to bear on the negligent. The following table of the scholarship record for 1915–16 as shown by the written semi-annual examinations, indi-

cates the standard maintained. It shows that 37 per cent of those examined were conditioned, failed, or both, in one or more subjects. The ratio of failures was highest in the first year and lower for each succeeding year, the candidates for the degree of Master of Laws having no failures. This decrease is due to the elimination of poor students in the earlier years. The high record of special students is due to many of them being postgraduate students taking special subjects, and to the small amount of work carried by the others.

Scholarship record as indicated by written examinations 1915–16:

	LL.B. FIRST YEAR		LL.B. SECOND YEAR		LL.B. THIRD YEAR		LL.M.		SPECIAL ALL YEARS		TOTAL	
	No.	*Per cent*	*No.*	*Per cent*	*No.*	*Per cent*	*No.*	*Per cent*	*No.*	*Per cent*	*No.*	*Per cent*
Students examined	122		95		99		18		35		369	
Passed in all subjects	62	51	50	53	78	79	18	100	25	71	233	63
Conditioned, failed or both in one or more subjects	60	49	45	47	21	21			10	29	136	37
Removed all conditions in October 1916	17	14	15	16	8	8					40	11
Students who now have clear records on work 1915–16	79	65	65	69	86	87	18	100	25	71	273	74

It has been urged in some quarters that though these methods and standards may be best where students devote all their time to the study of law, they are unsuited to conditions in Washington where most students of law are employed. The argument assumes that something short of the best must do here. It pays regard to individual demand to practice law rather than to the public need. This school takes the position that the handicap of self-support should be overcome by greater ability and industry, or by devoting longer time to the course, and that its graduates should not enter the profession except on an equality of preparation with their more fortunate competitors. The aim is not to make the profession an aristocratic privilege but to save the individual from failure and to safeguard the public right to effective service. The standard set is reasonable, the ratio is not higher than in other first class schools, and over 70 per cent of the graduates complete the work in the three years.

The wholesome effect of the policy pursued is evident in the character of the student body. The students are mature, the average age being over twenty-six years. A large proportion of them are college graduates. In 1915–16 of the 368 candidates for degrees, 104 were college graduates and 111 others had part of a college course. In the same year two other law schools in Washington each reported to the United States Commission of Education 5 college graduates. The other two largest

schools do not include this item in their reports. According to the Commissioner's report for 1915–16, this school stood in seventh place among Association Law Schools in regard to the number of college graduates enrolled. My report for 1913–14 shows the superior attainments of these college trained students in legal scholarship. The following table gives the sixty colleges from which they were graduated.

Colleges from which Candidates for Degrees were Graduated.

Alabama, University of	1	Michigan, University of	3
Austin College	2	Military College of South Carolina	1
Bowdoin College	2	Minnesota, University of	1
Butler College	1	Mississippi, University of	1
Campbell College, Holton, Kansas	1	Missouri, University of	2
Case School of Applied Sciences	2	Nebraska, University of	2
Central University of Iowa	1	New York, University of	1
Central University of Kentucky	1	North Carolina, University of	1
Chicago, University of	1	North Dakota, University of	1
Colby College	1	Ohio Northern University	1
Colgate University	1	Ohio State University	1
College of the City of New York	1	Pacific University	1
Colorado, University of	2	Pennsylvania, University of	1
Cornell University	4	Princeton University	4
Dartmouth College	3	Purdue University	1
Delaware College	1	Radcliffe College	1
Dickinson College	1	Swarthmore College	1
Ewing College	1	Syracuse University	1
Georgetown College	2	Tennessee, University of	1
George Washington University	13	U. S. Military Academy	1
Georgia, University of	2	U. S. Naval Academy	6
Hamilton College	1	Utah, University of	3
Harvard University	3	Washington and Jefferson College	1
Iowa State College	1	Washington and Lee University	2
Iowa Wesleyan College	1	Western Maryland University	1
Johns Hopkins University	1	William and Mary College	1
Kalamazoo College	1	Wisconsin, University of	2
Lafayette College	1	Worcester Polytechnic Institute	2
Lehigh University	3	Yale University	4
Maryland Agricultural College	1		
Massachusetts Institute of Technology	1		

Evidence of the thoroughness of the instruction and of the character of the student body is to be found in the success of the graduates in the Bar examinations of the District of Columbia. A record has been kept for the last five years, which shows the average ratio of failures of graduates to be less than 5 per cent, as compared with about 40 per cent

of all other candidates. In 1915, all the 25 graduates who wrote the examinations passed, while two-fifths of the other candidates failed. They are, so far as can be learned, equally successful in other jurisdictions, but for these no complete reports are available.

The school was one of those which in 1900 joined in organizing the Association of American Law Schools and it has been a member of the Association since that time. This Association was organized to improve the standard of legal education, and has certain requirements as a basis of membership. It now comprises 47 of the foremost law schools of the United States. This school is the only member of the Association in the District of Columbia. While reciprocity in advanced standing is not a rule of the Association, each member school is usually credited by the others. Thus students in this school have the advantage of being able to complete their work, or to pursue post-graduate studies in schools of other jurisdictions to which they may have occasion to remove. In this manner students complete the course in Harvard, Columbia, Chicago, Michigan, and Wisconsin, receiving credit for the work done here.

The policy of the school might be expected to result in very slow growth in numbers. Its growth is slow as compared with what it would be if its entrance requirements were lower and its course easier. It is estimated that for every student matriculated at the beginning of 1916–17, another seeking admission was found ineligible. The school could double its attendance in a short time if it took a different view of its function. But that there is a growing appreciation of the school's ideal is evidenced by the following tables, showing the enrollment from

Enrollment 1911–16 in Twelve Law Schools in the Association of American Law Schools which had the Largest Enrollment 1911–12

	1911–12	1912–13	1913–14	1914–15	1915–16
Harvard	809	745	694	730	791
Michigan	793	779	612	679	573
Southern California	481	530	605	551	698
Yale	420	179	133	146	196
Columbia	417	525	493	494	548
Pennsylvania	374	381	374	360	255
Cornell	330	335	293	274	242
Minnesota	325	214	176	177	171
Chicago	320	286	319	344	351
Texas	318	389	416	352	407
Northwestern	309	308	352	367	352
George Washington	306	312	355	403	425
Relative rank of George Washington.	12th	8th	7th	5th	5th

Enrollment in Law Schools in the District of Columbia 1911–16

	1911–12	1912–13	1913–14	1914–15	1915–16
Georgetown University	924	1003	1005	998	1004
George Washington	306	312	355	403	425
National University	238	179	201	171	153
Washington College of Law	118	114	129	148	139
Catholic University	28	56	89	100	115

1911–16 of the twelve schools in the Association of American Law Schools which had the largest enrollment in 1911–12, and the enrollment for the same period in law schools in the District of Columbia.

That the school renders a national service is evidenced by the following table showing the legal residence of students registered in 1915–16. They came from the District of Columbia, 44 states, Hawaii, Phil-

Table showing Legal Residence of Students registered 1915–16

Alabama	2	New Mexico	1
Arkansas	4	New York	26
California	5	North Carolina	5
Colorado	4	North Dakota	3
Connecticut	4	Ohio	15
Delaware	4	Oklahoma	5
District of Columbia	110	Oregon	2
Georgia	7	Pennsylvania	20
Hawaii	2	Rhode Island	1
Idaho	2	South Carolina	2
Illinois	12	South Dakota	5
Indiana	4	Tennessee	8
Iowa	12	Texas	9
Kansas	8	Utah	15
Kentucky	4	Vermont	4
Louisiana	1	Virginia	19
Maine	5	Washington	2
Maryland	21	West Virginia	3
Massachusetts	16	Wisconsin	9
Michigan	7		
Minnesota	7	Philippines	1
Mississippi	4		
Missouri	11		
Montana	3		
Nebraska	3	Brazil	1
New Hampshire	1	Cuba	2
New Jersey	3	Roumania	1

ippine Islands, Cuba, Brazil, and Roumania. The largest numbers were, from the District 110, New York 26, Maryland 21, Pennsylvania 20, Virginia 19, Massachusetts 16, Ohio 15, Utah 15, Illinois 12, Iowa 12, and Missouri 11.

The gross registration for the year was 413 men, 12 women, a total of 425, an increase of 22 over the preceding year.

Of the students, 58 reported no outside employment, while 367 were engaged in the various departments of the United States and District Governments, or in private employment. A table in my report for 1914–15 shows the outside work in which the students were engaged, and would not be materially different for the past year. The largest numbers in the Government Service were, Patent Office Examiners 62, Congressional Clerks, Secretaries, etc., 43, Department of Commerce 14, Congressional Library, Department of Agriculture, and War Department 13 each, Post Office 12, D. C. Executive Departments 10, Treasury Department 9, Interstate Commerce Commission 9, Navy and Marine Corps Officers 8.

The following table shows the classification by degrees sought, by years, and by sections:

		a.m.	p.m.	total	
Candidates for LL.B. degree	First Year	39	108	147	352
	Second Year	19	80	99	
	Third Year	15	91	106	
Candidates for LL.M. degree		4	17		21
Special Students (not eligible for degree)		15	42		57
Total registration		92	338		430
Less counted both for LL.B. and LL.M.					5
					425

This table shows a gratifying increase in the numbers enrolled in the forenoon section. This is doubtless due in part to the fact already referred to, that a complete course was available in the forenoon to all three years' classes, where it had hitherto been wholly provided for only first, and partially for second and third year students. This change is beneficial to both sections of the classes as the forenoon classes have been too small and the afternoon rather large for the most efficient work. A further increase in the forenoon section is highly desirable. The work of the two sections of each class was synchronized, the same lectures being given both forenoon and afternoon, so enabling students who could not be present at the one period to get the lecture missed by attending the other period of the same day.

There is also to be noted an increase in the number of candidates for the Master of Laws degree which entails a fourth year of study. The section on Legal Education of the American Bar Association adopted a

resolution at its last meeting favoring a minimum course of four years for a degree in law. Dr. Redlich in his report to the Carnegie Foundation recommended a fourth year devoted to the study of such subjects as Jurisprudence and Roman Law. Teachers and thoughtful graduates have felt the need of instruction that will refer the principles learned throughout the undergraduate course to their common philosophical bases and that will provide a standard for comparison of these principles. The former need would be supplied by the study of Jurisprudence, while the comparative study of Roman Law would develop a mental receptivity and breadth of view conducive to the readaptation of the common law to present social conditions.

A four year course is scarcely practicable as a requirement at the present time but volunteers for it should be encouraged. This school is in a good position for building up a post-graduate course as the students being self-supporting can undertake it at comparatively small cost. The school should provide courses in Jurisprudence, Roman Law, and other special subjects so soon as circumstances will permit.

Of the 425 students enrolled, 67 withdrew or were dropped from the rolls during the year, and 75 were graduated. Of the 283 remaining at the end of the year 95, including those denied re-registration, most of those required to repeat the work, and some placed on probation, have not returned, and 188 are back in the school. Of the graduates twelve have returned for further work, making a total of 200 of the year's students enrolled at present.

The degree of LL.B. was conferred on 66 candidates, and the degree of LL.M. on 11, including two of those who had received the LL.B. at an earlier convocation. There was an increase of 13 in the LL.B. degrees conferred, and of 7 in the LL.M. degrees over the preceding year.

The years of study for the LL.B. degree by the successful candidates were 3 years by 47, 3½ years by 11, 4 years by 4, 5 years by 1, 5½ years by 2, 7 years by 1. The last mentioned case illustrates how a very busy man can acquire a legal education. This student had onerous employment and so carried only a small amount of work each year. He made a clear and good record, and completed his course at the same expense as though he had done the work in three years, and doubtless to much better advantage.

The Law School held a summer session for the first time in the summer of 1916. Lectures were given by four resident instructors from June 26 to August 4, a period of six weeks. Classes were held from 7 to 8.40 a.m., and from 4.50 to 6.30 p.m., five days a week. The average enrollment in classes was fifteen. The total number enrolled was 65. Of these thirteen entered the school for the first time, the others were continuing their studies with a view to earlier graduation, or to lighten their work in the regular session. Attendance was better than in the regular session and the ratio of failures and conditions lower. The experiment was regarded as a success and the session should be continued.

The Legal Aid Society of the school dealt with fifty-two cases during the year. Of these four cases were before the courts, and advisory opinions were given in others. Relief was secured in a considerable number of cases. The students take great interest in the work and derive valuable experience from it.

The Employment Bureau organized at the beginning of the year received thirty-four applications for help of various kinds. Positions were sought by 31 out-of-town and 20 local students or prospective students. It was found impossible to secure positions for those who are not in the city. Of the local applicants five were placed in positions through the Bureau. The result justifies the effort and the service will become more useful as it becomes better known.

Attention was called in previous reports to the need of a building for the Law School. The library facilities are inadequate, the class rooms are too few, and not adapted to the work of the school. The money paid as rent is needed for internal development. More instructors are needed both for undergraduate and post-graduate instruction. The Capital City is most attractive for students of law. Nearly 10 per cent of the students of law in the schools of the United States are in the law schools of this city. The number will increase as there is developed here a school with adequate equipment, the best instruction and standards. This school has already a large enrollment of excellent students. Its possibilities are unlimited. The school is delighted that an effort is being made to secure a building. It appeals to all alumni who have enjoyed the opportunity the school offers, to those interested in the men and women who are striving for a thorough legal education, and to all who would have legal education serve public ends, to assist in the undertaking.

Respectfully,

E. FRASER,

Dean.